

ENVIRONMENTAL ASSESSMENT

**For
CONSTRUCTION OF A NEW MARINA OPERATIONS
BUILDING AND ASSOCIATED FUEL SUPPLY SYSTEM**

HURLBURT FIELD, FLORIDA



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Air Force Special Operations Command
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Finding of No Significant Impact/Finding of No Practicable Alternative (FONSI/FONPA)

For Construction of the New Marina Operations Building and Associated Fuel Supply System, Hurlburt Field, Florida

Introduction:

Pursuant to the Council on Environmental Quality Regulations for implementing the National Environmental Policy Act (NEPA) promulgated at 40 Code of Federal Regulations Part 1500 (40 CFR §§1500-1508), and Air Force Instruction (AFI) 32-7061, *Environmental Impact Analysis Process*, promulgated at 32 CFR Part 989, an Environmental Assessment (EA) has been prepared assessing the potential environmental impacts associated with the proposed construction of the marina operations facility and associated fuel supply system at the Santa Rosa Sound, Hurlburt Field, Florida.

This Finding of No Significant Impact (FONSI) and Finding of No Practicable Alternative (FONPA) are required by 40 CFR §1501.4(e) and AFI 32-7061 promulgated at 32 CFR §989.15, and Executive Order (EO) 11988, *Floodplains Management*, and EO 11990, *Protection of Wetlands*, respectively.

Description of Proposed Action and Alternatives:

Proposed Action

The Proposed Action has two main components: 1) construction of a new marina operations facility and 2) installation of a new fuel supply system. These components are summarized below and additional details about the Proposed Action are provided in Chapter 2 and Appendix A of the EA. Beach cleaning would also occur as part of the Proposed Action. The beach area adjacent to the marina would be cleaned using an H. Barber Model 850 Sandman walk behind sand sifter or equivalent for regular cleaning and maintenance of the beach area (i.e., broken glass, nails, screws, wood splinters, etc.).

Construction to implement the Proposed Action would present common construction hazards and impacts. All construction work on the site would occur within the guidelines of relevant procedures and controls to ensure that appropriate industrial safety precautions are followed to prevent accidents and injuries.

Disturbances to soil surfaces would be restored by backfilling, compaction and re-grading, as appropriate. The majority of the construction activities would take place in previously disturbed areas. The only consumption of nonrenewable resources would be the relatively minor amounts of concrete and metals used and the construction vehicle fuel used. Small amounts of construction waste and debris would be generated during implementation of the Proposed Action. This waste would be surveyed as necessary to ensure that it was free of hazardous constituents and disposed of at approved landfill(s). There would be no releases of contaminants to the soil or groundwater from implementation of the Proposed Action.

Construction of Marina Operations Facility

The new marina operations facility would be a 50-foot by 25-foot pre-engineered metal building. The building would be constructed slab-on-grade east of the existing unpaved marina parking lot. Underground utilities would be installed to the building including electricity, water, wastewater, and telephone. The building foundation area extending east of the existing parking area would be backfilled and built up to the level of the existing parking area. A minimum six-inch thick concrete slab would be poured monolithically with the building slab and would be no less than 12-feet wide and 25-feet long adjacent to the building. The concrete slab would be graded to drain at approximately two percent toward the drain and have a two-inch high minimum lip around the entire perimeter of the concrete slab and along the building border to prevent uncontrolled runoff to the surrounding area. Liquids would be contained in the basin by a durable valved outlet and fuel constituents would be captured and removed prior to discharge of water to the sewer.

Installation of Associated Fuel Supply System

A 3,000 to 4,000 gallon double walled aboveground storage tank would be installed and a 19-foot by 22-foot, eight-inch thick concrete foundation pad would be constructed for the tank and a 14-foot by 50-foot, eight-inch thick concrete secondary containment pad would be constructed for truck unloading. The concrete foundation pad would be poured monolithically with the fuel truck discharge area. The concrete pad would be sloped to a valved outlet that would hold the full length of any truck (typically 2,000 gallons) that would deliver fuel to the aboveground storage tank and any liquid falling from the truck. The lip of the concrete pad would be at least two inches high and the discharge of the valved outlet would be routed to the existing sanitary sewer by curbing. An oil and water separator would be installed to intercept hydrocarbons.

A complete and functional gasoline distribution and dispensing system would be installed to facilitate the sale of fuel to boats at the marina. The system would include, but would not be limited to, a dispenser, double-walled underground piping, containment and dispenser sumps, a leak detection and tank level monitoring system with remote annunciation in the Teal House, and a dispensing monitor and control system located in the Teal House. An approximately 3,000 to 4,000-gallon Convault fuel aboveground storage tank would be installed. Underground double walled pipe would exit the 3,000 to 4,000 gallon aboveground storage tank, go under the Marina Road, and terminate at a new dispenser at the marina.

No Action

The old marina operations facility was first damaged by Hurricane Opal and further damaged by Hurricane Ivan. Current maintenance activities are occurring in temporary facilities that do not meet base building standards and are not adequate for marina operations over the long term. Since the building was damaged, personnel have been using a pole barn type building and a portable storage shed to perform boat maintenance. The existing temporary facilities do not provide adequate areas for maintenance operations, tool and equipment storage, office areas, or restroom facilities. The current

facilities are vulnerable to storm damage because of their elevation and proximity to the Sound. The No Action alternative involves continued use of these temporary facilities.

The existing fuel storage and dispensing system would continue to be used in its current location under the No Action alternative. These structures have been damaged in the past from storm surges due to their location on the Sound and would continue to be vulnerable to damage from future storms.

Summary of Environmental Consequences:

The environmental effects associated with the Proposed Action are fully described in the EA for this project. The EA identified no significant effects to resources provided proper best management practices (BMPs) are followed during construction. A minor alteration in site topography, geography, and land cover would result from construction activities. No significance was found in association with these actions. Effects to soils, vegetation, biological resources, water resources, air quality, and noise would be temporary and minor. These short-term effects would be minimized through the implementation of design measures and BMPs, and no significant environmental effects were identified. The issues addressed in the EA are summarized below.

Socioeconomics - The Proposed Action represents a small construction project and would have only a negligible beneficial effect on the local economy.

Vegetation - Slash pine (*Pinus elliottii*) occurs in the area proposed for construction of the new marina operations building. Approximately 50 trees would be removed for construction. It is estimated that 15 trees are over six inches diameter at breast height (dbh); these trees would be replaced in a new location.

Noise - Noise levels are not usually an issue at Hurlburt Field except during brief periods of higher noise and vibration levels due to specific onsite facility activities. Construction activities would result in temporary and short duration increases in noise and vibration levels.

Services, Utilities, and Access - The Proposed Action would not introduce new services or systems onto Hurlburt Field; however, existing service and utility lines within the project area would be extended or relocated for project implementation. All new electrical lines would be installed underground and new underground cables would be required to supply telephone service to the building. During construction, access to the project area would be safely and adequately maintained for local and through traffic.

Installation Restoration Program (IRP) Sites - There are no IRP sites in the project area and therefore no effects would occur from the Proposed Action.

Environmental Justice - Based on available information, no disproportionate adverse effects on minority or low-income populations in Okaloosa County, Florida would result from the Proposed Action.

Topography and Soils - Construction of the new marina operations building and fuel storage and dispensing system would have a minor impact on topography. The sloped area adjacent to the existing unpaved parking lot would be graded to create a level building surface for the new building. Minor grading would also occur at the locations where the fuel storage and dispensing system would be installed. Temporary soil disturbance would occur related to construction. The topography of the area is relatively flat and the potential for soil movement offsite is considered to be slight. The removal of a few existing trees for construction is not expected to result in an increase in erosion within the project area because of the relatively flat topography. BMPs and design criteria would minimize the potential for effects.

Water Resources - BMPs in place during construction would protect against spills during operation and minimize the potential for impacts to groundwater. Decreased infiltration could be caused by the compaction effect of heavy machinery and/or materials used during construction. Groundwater recharge could decrease although only minimally due to increased impervious areas over the project sites soil. The increase in impervious area would have a negligible impact on the quantity of groundwater being recharged because of the small percentage of area affected.

Construction activities could be a temporary source of pollution and sediment loading that could result in a temporary, minor impact on surface water quality. Because of its location it is not expected that construction of the new marina operations building would affect any surface water bodies. Construction of the new fuel storage and dispensing system has the potential to affect water quality due to increased sediment loading and a potential change in chemical composition from fuel leaks and spills, chemical spills from construction materials, etc. While runoff containing sediment could enter waterways during construction activities, implementing BMPs and conservation measures would effectively reduce the potential for water quality effects.

Wetlands have been designated adjacent to the project area; the United States Army Corps of Engineers (USACE) surveyed the area in 1998 but the Florida Department of Environmental Protection (FDEP) never claimed them as wetlands. This designation of the area as a wetland has been questioned by Hurlburt Field environmental personnel who believe that the area was misidentified or that a change in hydrology has changed the status of the area. Hurlburt Field is working with the USACE on a re-determination of the area. Evaluation of potential wetland impacts and actions to avoid adverse effects would be reviewed during final design of the project site. No effects to wetlands would result from operation of the proposed facilities.

A floodplain/storm surge fringe exists where the installation borders Santa Rosa Sound. This project area is classified as a floodplain due to its potential to flood during heavy storm surges, such as those occurring during hurricanes. No significant changes to the floodplain would occur as a result of the Proposed Action.

Rare, Threatened, and Endangered Species - No federal or state listed threatened or endangered species, species of concern, or critical habitat are documented within the proposed project area. Construction impacts to wildlife would be negligible due to the

lack of important wildlife habitat in the project area. Terrestrial mammals, if present in adjacent forested areas west of the parking area, may be affected by construction activity and may avoid the area in the short term. Although some habitat disturbance/land clearing activity would occur, the impact to non-listed species in the immediate area would be minimal and temporary. Operation of the proposed facilities would not cause additional impacts. No effects to special status plant species would occur because none are present in the project area.

Air Quality - Construction activities would have a minor and temporary effect on air quality due to an increase in emissions by heavy construction equipment and an increase in dust from construction activities. BMPs would be incorporated into on-site work practices to minimize potential air quality effects.

Visual Resources - The marina operations building would be visible from the backyards of the residential area north of the project area. Trees would be planted to the north of the building to provide a vegetative buffer between the facility and the residential area. Overall the visual changes are considered to be positive because the new facility would be similar in appearance to other existing buildings in the area.

Cultural Resources - Cultural resources surveys have been conducted for the entire area south of U.S. Highway 98 and coordination with the State Historic Preservation Office (SHPO) has occurred. No previously recorded historic resources, or National Register of Historic Places (NRHP) – listed or – eligible properties are present within the project area and no adverse effects to cultural resources would result from the Proposed Action. The SHPO has been consulted with regard to this project and determined that no adverse effects would result.

Hazardous Waste - Hazardous material and debris associated with construction activities would be managed and disposed of in accordance with all federal and state regulations.

Cumulative Effects – There are a number of on-going improvement projects currently being implemented as well as multiple foreseeable future actions planned at Hurlburt Field. The Proposed Action in conjunction with these other activities would not have a permanent degradation effect on the environment if proper planning, pollution prevention and conservation measures, and BMPs are incorporated into and implemented for all present and future actions.

Alternatives Considered:

In addition to the alternatives described above, three other alternatives were considered during project analysis. These alternatives are described below along with the rationale for why they were eliminated from further consideration.

1. Redevelopment of the existing site was considered and discounted for the following reasons. The location of the existing above ground fuel storage tank and dispensing unit is very close to the inlet area to the marina and the adjacent backyard of base housing. Delivery of fuel to the above ground storage tank as well as the siting

presents safety and environmental concerns. These sites have been damaged by previous storms (both Hurricanes Opal and Ivan resulted in damage to the building and the storage tank) and because of the proximity to the shoreline the potential for future storm damage is high. Relocating the fuel storage tank to a higher elevation site farther away from the Sound would reduce the potential for damage from storms.

2. Alternate locations on the Soundside of the base were considered for construction of the marina operations building. Housing exists west of the proposed construction site making building unfeasible in that location. Existing development (e.g., fuel docking area, officer's club, nature preserve area, etc.) occurs to the east of the proposed construction site making that area unfeasible for construction as well because of conflicts with existing uses.
3. Construction of the marina operations building away from the Sound was also considered. This would require the transport of large boats across U.S. Highway 98 creating safety and traffic flow concerns. In addition, remaining buildable sites on the installation north of U.S. Highway 98 need to be preserved for future mission facilities.

The one alternative to the Proposed Action that is considered in detail in the EA is the No Action alternative. However, the No Action alternative does not meet base development requirements and compatible land use issues and would leave the existing structures vulnerable to storm surge damage due to their location.

Public Notice:

The United States Air Force's (USAF's) NEPA guidance provides for public participation in the NEPA process prior to the approval of a FONSI/FONPA and implementation of the Proposed Action. Upon issuance of a FONSI/FONPA, a 30-day period begins during which time agencies and the public may submit comments on the Proposed Action, the EA, or the FONSI/FONPA. A copy of the EA was made available at the Mary Esther Public Library, 100 W. Hollywood Blvd. Mary Esther, Florida during the 30-day comment period. Throughout the process, the public was directed to obtain information on the status and progress of the Proposed Action and the EA through the Hurlburt Field Public Affairs Office at (850) 884-6199 or the Hurlburt Field Environmental Flight at (850) 884-7921.

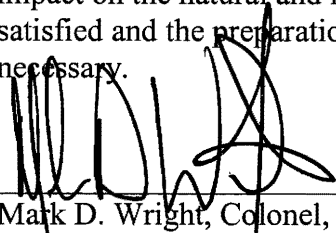
Finding of No Practicable Alternative:

A FONPA must be prepared when the alternative selected is located in wetlands or floodplains. The EA, which is incorporated by reference into this FONSI/FONPA, examined the potential effects of the Proposed Action and the No Action alternative. Implementation of the Proposed Action would result in a combination of short- and long-term minor adverse and long-term beneficial effects. The Proposed Action would not fill or permanently destroy any of the wetlands in the area. No wetland impacts would occur due to operation of the proposed facilities. No significant changes to the floodplain would occur as a result of the Proposed Action. After taking the above information into consideration, the USAF finds no practicable alternative to the Proposed Action. The USAF has determined that all practicable measures have been taken to minimize harm to

surface waters and floodplains from implementation of activities associated with the Proposed Action.

Finding of No Significant Impact:

A careful review of the EA shows that the Proposed Action would not have a significant impact on the natural and human environment. The requirements of NEPA have been satisfied and the preparation of an Environmental Impact Statement (EIS) is not necessary.



Mark D. Wright, Colonel, USAF
Director, Installations and Mission Support

13 Jan 2006
Date

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ACRONYMS/ABBREVIATIONS

AFI	Air Force Instruction
amsl	above mean sea level
API	American Petroleum Institute
ARPA	Archaeological Resources Protection Act
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
dbh	diameter at breast height
DOD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Orders
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCMP	Florida Coastal Management Program
FDEP	Florida Department of Environmental Protection
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
IBC	International Building Code
IRP	Installation Restoration Program
NAAQ	National Ambient Air Quality
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NACE	National Association of Corrosions Engineers
NCA	Noise Control Act
NEC	National Electrical Code
NFPA	National Fire Protection
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWP	Nation Wide Permit
POL	petroleum, oil, and lubricants
RCRA	Resource Conservation and Recovery Act
SHPO	State Historic Preservation Officer
SSPC	Steel Structures and Painting Counsel
SWPPP	Storm Water Pollution Prevention Plan
UFC	Uniform Fire Code
USACE	United States Army Corps of Engineers
USAF	United States Air Force

1 PURPOSE OF AND NEED FOR PROPOSED ACTION

1.1 Introduction

This Environmental Assessment (EA) discloses the direct, indirect, and cumulative environmental effects that would result from the Proposed Action as required by the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations, related Air Force Instruction (AFI) 32-7061 (32 Code of Federal Regulations [CFR] 989), and Department of Defense (DOD) directives. The primary purpose of this EA is to facilitate a decision and to ensure the policies and goals defined by NEPA and other guiding documents are adhered to. The EA provides the decision maker with pertinent information regarding the environmental effects of implementing this proposal and provides a basis for choice among the alternatives. Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at Hurlburt Field, Florida. The EA is organized into the following five chapters and appendices.

- *Chapter 1 – Purpose and Need:* This chapter includes the purpose of and need for the project and a brief description of the proposal for achieving that purpose and need. A summary of regulatory requirements and issues along with the scope of analysis are also addressed.
- *Chapter 2 – Proposed Action and Alternatives:* This chapter presents the alternatives that were considered, and provides a detailed description of the Proposed Action and No Action alternatives. A summary comparison of the environmental consequences associated with each alternative is presented.
- *Chapter 3 – Affected Environment:* This chapter describes the affected environment – that is those resources that have the potential to be affected by implementation of the Proposed Action.
- *Chapter 4 – Environmental Consequences:* This chapter describes the environmental effects of implementing the No Action and Proposed Action alternatives. The analysis is organized by resource and considers direct and indirect effects. The effects of the No Action alternative are presented first and provide a baseline for evaluation and comparison of the Proposed Action. Cumulative effects are discussed at the end of the chapter.
- *Chapter 5 – Consultation/Coordination:* This chapter describes the public involvement process and lists those agencies, interested groups, and members of the public that were consulted or provided comments during the analysis process.
- *Appendices –* The final section provides a series of attachments that present more detailed information in support of the EA to assist the Hurlburt Field environmental decision maker in making an informed decision.

1.2 Purpose of and Need for Proposed Action

The Proposed Action includes construction of a new marina operations facility and associated fuel storage and dispensing facility at the Soundside Marina at Hurlburt Field, Florida. Hurlburt Field is a United States Air Force (USAF) installation located between Fort Walton Beach and Pensacola in the Florida panhandle.

The marina operations building and ancillary facilities were first damaged by Hurricane Opal and further damaged by Hurricane Ivan. Hurricane Opal caused extensive damage at Hurlburt Field in 1995 from high winds and storm surges. The storm surge elevation resulting from Hurricane Opal came to about the 8.5-foot contour line.

Maintenance operations are currently occurring in temporary facilities that do not comply with base building standards and are not adequate for marina operations over the long term. The existing temporary facilities do not provide adequate areas for maintenance operations, tool and equipment storage, office areas, or restroom facilities. As a result, many maintenance activities are performed outside.

The existing fuel storage and dispensing system supplies fuel for boating uses associated with the Soundside Marina. The fuel storage and dispensing system has been damaged in the past from storm surges due to their location on the Sound and would continue to be vulnerable to damage from future storms that can result in environmental hazards such as fuel spills. Relocating the fuel storage and dispensing system to a higher elevation site would reduce the risk of damage from future storms.

The action is needed because the current facilities are vulnerable to storm damage because of their elevation and proximity to the Sound. Hurricanes appear to be increasing in frequency at Hurlburt Field with seven occurring since 1995. Storm surges associated with hurricanes are a significant threat because the installation is located adjacent to the Sound. The purpose of the Proposed Action is to reconstruct the facilities in a different location. Relocating the facilities to higher ground would reduce the potential for damage from storms.

1.3 Applicable Regulatory Requirements

Copies of the draft EA were provided to the Florida State Clearinghouse for distribution to appropriate reviewers at the state, regional, and local levels. Based on comments received the Florida Department of Environmental Protection (FDEP) made the state's determination as to whether the action is consistent with the Florida Coastal Management Plan (FCMP). Hurlburt Field received this determination from the Florida State Clearinghouse (See Section 5.1, *Public Involvement*, for more details). Representative federal, state, and Hurlburt Field environmental permits that may be required for the Proposed Action are listed in Table 1-1.

Table 1-1. Permit Requirements.

Agency	Permit	Regulation	Required For		Reason	Needed
			Marina Operations Building	Fuel Supply System		
United States Army Corps of Engineers (USACE)	404 Permits Nation Wide Permit (NWP)	33 U.S.C. 1344 Section 404	X		Possible wetland impact	Yes
FDEP	State Programmatic General Permit	(SPGP III-R1); 33 U.S.C. 1344 - Section 404; Section 10 of Rivers and Harbors Act of 1899	X		Possible wetland impact	No; non-jurisdictional for Florida
FDEP Division of Waste Management	Storage Tank Facility Registration Form	Chapter 62-762, F.A.C.		X	New Installation	Yes
FDEP Division of Waste Management	Containment and Integrity Plan Certification Form	Rule 62-761.890(7). F.A.C.		X	New Installation	Yes
State Historic Preservation Officer (SHPO)	Letter from SHPO	Section 106 36 CFR 800 Section 106	N/A	N/A	Construction in a known site	No

The FCMP consists of 23 statutes and their implementing rules. A consistency determination is required to evaluate how the proposed project would affect all 23 statutes in the FCMP. This information is contained in Table 1-2.

Table 1-2. Florida Coastal Management Plan Consistency.

Statute	Consistency	Scope
Chapter 161 <i>Beach and Shore Preservation</i>	Based on the analysis in the EA, the proposed activities would not adversely affect the state's beaches. Development already exists on the beaches in the area.	Authorizes the Bureau of Beaches and Coastal Systems within the FDEP to regulate the construction on or seaward of the state's beaches.
Chapter 163, Part II <i>Growth Policy; County and Municipal Planning; Land Development Regulation</i>	Not applicable to proposed activities.	Requires local governments to prepare, adopt, and implement comprehensive plans that encourage the most appropriate use of land and natural resources in a manner consistent with the public interest.
Chapter 186 <i>State</i>	Not applicable to proposed	Details state-level planning

Statute	Consistency	Scope
<i>and Regional Planning</i>	activities.	requirements. Requires the development of special statewide plans governing water-use, land development, and transportation.
Chapter 252 <i>Emergency Management</i>	The Proposed Action would mitigate the effects of natural disaster. The action is needed because the current facilities are vulnerable to storm damage due to their elevation and proximity to the Sound. Relocating the marina operations facility and associated fuel storage and dispensing system to a higher elevation site would reduce the risk of damage from future storms.	Provides for the planning and implementation of the state's response to natural and manmade disasters, efforts to recover from natural and manmade disasters, and the mitigation of natural and manmade disasters.
Chapter 253 <i>State Lands</i>	Not applicable to proposed activities.	Addresses the state's administration of public lands and property of the state and provides direction regarding acquisition, disposal, and management of all state lands.
Chapter 258 <i>State Parks and Reserves</i>	Not applicable to proposed activities.	Addresses the administration and management of state parks and preserves.
Chapter 259 <i>Land Acquisition for Conservation or Recreation</i>	Not applicable to proposed activities.	Authorizes acquisition of environmentally endangered lands and outdoor recreation lands.
Chapter 260 <i>Recreational Trails System</i>	Not applicable to proposed activities.	Authorizes the acquisition of land to create a recreational trails system and to facilitate the management of the system.
Chapter 267 <i>Historical Resources</i>	Based on the analysis in the EA no adverse effects to historical resources would occur. Cultural resources surveys have been conducted for the entire area south of U.S. Highway 98 and coordination with SHPO has occurred. No previously recorded historic resources, or National Register of Historic Places (NRHP) – listed or – eligible properties are present within the project area. Cultural resource monitoring would	Addresses the management and preservation of the state's archaeological and historical resources.

Statute	Consistency	Scope
	be required during all subsurface disturbance activities to protect any previously-unidentified historical resources.	
Chapter 288 <i>Commercial Development and Capital Improvements</i>	Not applicable to proposed activities.	Provides the framework for promoting and developing the general business, trade, and tourism components of the state economy.
Chapter 334 <i>Transportation Administration</i>	Not applicable to proposed activities.	Addresses the state's policy concerning transportation administration.
Chapter 339 <i>Transportation Finance and Planning</i>	Not applicable to proposed activities.	Addresses the finance and planning needs of the state's transportation system.
Chapter 370 <i>Saltwater Fisheries</i>	Not applicable to proposed activities.	Addresses the management and protection of the state's saltwater fisheries.
Chapter 372 <i>Wildlife</i>	Based on the analysis in the EA, no long-term adverse effects to wildlife would occur from the proposed activities.	Addresses the management of the wildlife resources of the state.
Chapter 373 <i>Water Resources</i>	Based on the analysis in the EA, construction activities could be a temporary source of pollution and sediment loading that could result in a temporary, minor impact on surface water quality. Implementation of best management practices (BMPs) would effectively reduce the potential for any water quality effects.	Addresses the state's policy concerning water resources.
Chapter 375 <i>Multipurpose Outdoor Recreation; Land Acquisition, Management, and Conservation</i>	Not applicable to proposed activities.	Develops a comprehensive multipurpose outdoor recreation plan to document recreational supply and demand, describe current recreational opportunities, estimate the need for additional recreational opportunities, and propose the means to meet the identified needs.

Statute	Consistency	Scope
Chapter 376 <i>Pollutant Discharge Prevention and Removal</i>	Not applicable to proposed activities.	Regulates the transfer, storage, and transportation of pollutants, and cleanup of pollutant discharges.
Chapter 377 <i>Energy Resources</i>	Not applicable to proposed activities.	Addresses the regulation, planning, and development of the energy resources of the state.
Chapter 380 <i>Land and Water Management</i>	Not applicable to proposed activities.	Establishes land and water management policies to guide and coordinate local decisions relating to growth and development.
Chapter 381 <i>Public Health, General Provisions</i>	Not applicable to proposed activities.	Establishes public policy concerning the state's public health system.
Chapter 388 <i>Mosquito Control</i>	Not applicable to proposed activities.	Addresses the mosquito control effort in the state.
Chapter 403 <i>Environmental Control</i>	Not applicable to proposed activities.	Establishes public policy concerning environmental control in the state.
Chapter 582 <i>Soil and Water Conservation</i>	Based on the analysis in the EA, impacts to soils from the proposed activities would be negligible. Soil disturbance would occur related to construction but BMPs and design criteria would minimize the potential for soil erosion.	Provides for the control and prevention of soil erosion.

1.4 Summary of Issues

Using field-related resource information and field surveys of the proposed project area along with experience of base personnel, a list of resource concerns to be considered in the analysis was developed. Based on a review of resources that are generally discussed in EAs two lists were developed: one that identifies issues to be carried forward for analysis in the EA and one that identifies issues that do not need to be carried forward for analysis. The issues carried forward and considered in Chapters 3 and 4 are: topography and soils; hydrology and water quality; rare, threatened, and endangered species; air quality; visual resources; cultural resources; and hazardous waste. The issues listed below are those that are not being carried forward for analysis in the EA. The discussion includes the rationale for why they were dropped from further consideration.

1.4.1 Issues Considered, But Not Analyzed

Socioeconomics

The Proposed Action would require goods and services from off the installation. Short-term benefits would include increased construction employment. However there are numerous other

construction projects occurring in the area, both on and off of the installation, that would contribute more to the local economy. The Proposed Action represents a small project that would have only a negligible beneficial effect on the local economy. Socioeconomic issues are not discussed further in the EA.

Vegetation

The project area is already developed and in general vegetation is sparse. No vegetation removal would occur for construction of the fuel storage and dispensing system because the areas are bare, sandy areas with no vegetation present. Slash pine (*Pinus elliottii*) occurs in the area proposed for construction of the new marina operations building. Approximately 50 trees would be removed for construction. It is estimated that 15 trees are over six inches diameter at breast height (dbh); these trees would be replaced under the Proposed Action as required by Hurlburt Field Landscape Development Plan. The trees north of the proposed building would remain in order to provide a vegetative screen from the backyards of housing located to the north. No other effects to vegetation would occur and this resource (with the exception of rare flora, Section 3.4.) is not discussed further in the EA.

Noise

Noise levels are not usually an issue at Hurlburt Field. However, on occasion there have been periods of higher noise and vibration levels due to specific onsite facility activities. Construction activities would result in temporary and short duration increases in noise and vibration levels. Measures would be put in place to minimize these potential impacts (e.g., major construction activities would be scheduled during normal daylight working hours and would be implemented consistent with 23 CFR, Part 772.19, which requires construction contractors to use equipment adapted to operate with appropriate noise muffling devices resulting in the least possible noise). An increase in noise and vibration levels is not expected upon completion of the proposed facility.

Services, Utilities, and Access

The Proposed Action would not introduce new services or systems onto Hurlburt Field; however, existing service and utility lines within the project area would be extended or relocated for project implementation. There is a system in place for identifying locations of utilities at Hurlburt Field and coordination with all major utility companies would be initiated prior to and during construction to locate and minimize disturbance to utility services. All new electrical lines would be installed underground and although communication cables currently exist in the project area, new underground cables would be required to supply telephone service to the building. During construction, access to the project area would be safely and adequately maintained for traffic. A traffic detour would not be required for the construction of the Proposed Action. These issues are not considered further in the EA.

Installation Restoration Program Sites

The Installation Restoration Program (IRP) was set up to identify, characterize, and remediate past environmental contamination on USAF installations. The IRP includes a process to evaluate past disposal sites, identify potential hazards to human health and the environment, control the migration of contaminants, and remediate the sites. There are no IRP sites in the project area and

therefore no effects would occur from the Proposed Action. IRP sites are not considered further in the EA.

Environmental Justice

Executive Order (EO) 12898 mandates that federal agencies determine if activities have a disproportionate health and/or environmental effect on minority or low-income populations. Environmental justice has been interpreted as the pursuit of equal justice and protection under all environmental statutes without discrimination based on race, ethnicity, and/or socioeconomic status. Communities sensitive to unjustly high health and environmental impacts are primarily areas in which over 50 percent of the population are minorities and low-income populations. The percentage of individuals falling below the poverty threshold in Okaloosa County was less than nine percent and minorities accounted for less than 20 percent of the county's total population (U.S. Census Bureau 2000). Based on available information, no disproportionate adverse effects on minority or low-income populations would result from the Proposed Action. This issue is not discussed further in the EA.

1.5 Scope of Analysis and Decision to be Made

This EA has been prepared in general accordance with the provisions set forth in NEPA and AFI 32-7061. Applicable environmental data was analyzed to document if any potential environmental consequences would occur as a result of the Proposed Action and No Action alternatives. Much of the information presented in this EA is based upon available environmental plans, existing published information regarding environmental issues in the proposed project area, and communication with regulatory agencies. References are listed at the end of this EA. Documents reviewed for analysis include:

- Integrated Natural Resource Management Plan, 16th Civil Engineering Squadron, Hurlburt Field, Florida, October 2001.
- Cultural Resource Management Plan, 16th Civil Engineering Squadron, Hurlburt Field, Florida, January 2002.
- Rare Plant and Animal Inventory of Air Force Special Operations Command, Hurlburt Field Florida, September 2003.
- Hurlburt Field General Plan, Woolpert LLP, 2002.

This EA evaluates the potential environmental consequences of the full range of activities associated with the Proposed Action and the reasonable alternative to the Proposed Action, which in this case is limited to the No Action alternative. In accordance with AFI 32-7061 and NEPA and CEQ regulations, this EA:

- Describes the existing baseline environmental conditions as related to the Proposed Action.
- Identifies and analyzes the potential environmental consequences of the Proposed Action, and potential cumulative environmental impacts of the Proposed Action and other projects.
- Identifies measures, as appropriate, to eliminate, limit, or reduce potential environmental effects associated with the Proposed Action.
- Identifies applicable environmental permits that are required for the Proposed Action.

A decision on whether to proceed with the Proposed Action rests on numerous factors, such as Hurlburt Field's mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, Hurlburt Field is guided by several

relevant statutes (and implementing regulations) and EOs that establish standards and provide guidance on environmental and natural resources management and planning. In addition to those mentioned above these include the Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act (NCA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Resource Conservation and Recovery Act (RCRA), EO 11988 (*Floodplain Management*), EO 11990 (*Protection of Wetlands*), EO 12088 (*Federal Compliance with Pollution Control Standards*), EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), and EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*).

The purpose of the EA is to provide information to Hurlburt Field decision-makers regarding potential environmental consequences of the Proposed Action and the No Action alternatives. The decision to be made regarding the Proposed Action is whether to:

- Direct preparation of a Finding of No Significant Impact (FONSI) indicating the potential environmental impacts of the Proposed Action are not significant and/or Finding of No Practicable Alternative (FONPA) indicating why no other practical alternative exists to avoid impacts to wetlands and floodplains
- Direct preparation of an Environmental Impact Statement (EIS) for the Proposed Action, or
- Take no action on the Proposed Action (i.e., No Action alternative) and continue to use existing temporary facilities.

2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Chapter 2 describes the alternatives considered in detail for the proposed marina operations facility and associated fuel storage and dispensing system and presents the alternatives in comparative form, defining the differences between each alternative and providing a basis for choice as required by the CEQ regulations (40 CFR §1502.14d). Actions analyzed in detail by this EA are the No Action and Proposed Action alternatives.

The alternative development process is described first, including alternatives that were considered but not carried forward for analysis. Full descriptions of the No Action alternative and the Proposed Action alternative are included along with a figure showing the location of the proposed project. The last section in this chapter provides a brief summary of the environmental consequences of the alternatives. A more detailed analysis of the effects on the environment follows in Chapter 4: *Environmental Consequences*.

2.1 Alternative Development

Hurlburt Field personnel worked with independent consultants to establish a plan for redevelopment of the marina operations facility. The redevelopment plan considers design and site selection criteria and facility requirements such as services and utilities. Based on evaluation of the plan the Proposed Action was designed to minimize effects on the environment.

Using field-related resource information and field surveys of the proposed project area along with experience of base personnel, a list of resource concerns to be considered in the analysis was developed. These concerns were considered and used to help refine the Proposed Action as presented in this chapter. Resource concerns identified in the development of this proposal are discussed in Chapter 3.

2.2 Alternatives Eliminated from Detailed Analysis

In addition to the alternatives described in detail, three other alternatives were considered during project analysis. These alternatives are described below along with the rationale for why they were eliminated from further consideration.

1. Redevelopment of the existing site was considered and discounted for the following reasons. The location of the existing above ground fuel storage tank and dispensing unit is very close to the inlet area to the marina and the adjacent backyard of base housing. Delivery of fuel to the above ground storage tank as well as the siting present safety and environmental concerns. Because of the proximity to the shoreline, the potential for storm damage to the building and the fuel storage site is high. These sites have been damaged by previous storms because they are within the storm surge elevation. Both Hurricanes Opal and Ivan resulted in damage to the building and the tank. Relocating the facilities to a higher elevation farther away from the Sound would reduce the potential for damage from storms.
2. Alternate locations on the Soundside of the base were considered for construction of the marina operations building. Housing exists west of the proposed construction site making building unfeasible in that location. Existing development (e.g., fuel docking area, officer's club, nature preserve area, etc.) also occurs to the east of the proposed

construction site making that area unfeasible for construction as well because of conflicts with existing uses.

3. Construction of the marina operations building away from the Sound was also considered. This would require the transport of large boats across U.S. Highway 98 creating safety and traffic flow concerns. In addition, remaining buildable sites on the installation north of U.S. Highway 98 need to be preserved for future mission facilities.

2.3 No Action Alternative

The No Action alternative provides a baseline condition from which to evaluate the potential consequences of not constructing a new marina operations facility. The old marina operations facility was first damaged by Hurricane Opal and further damaged by Hurricane Ivan. Currently maintenance operations are occurring in temporary facilities that do not comply with base building standards and are not adequate for marina operations over the long term. Since the building was damaged, personnel have been using a pole barn type building and a portable storage shed to perform boat maintenance operations (Figure 1-1).

The existing temporary facilities do not provide adequate areas for maintenance operations, tool and equipment storage, office areas, or restroom facilities. As a result, many maintenance activities are performed outside. The current facilities are vulnerable to storm damage because of their elevation and proximity to the Sound. The No Action alternative involves continued use of these temporary facilities. This option does not address the concerns for safety and protection of the environment from performing maintenance in inadequate facilities. In the long term, a new building will be required to meet environmental and safety concerns.

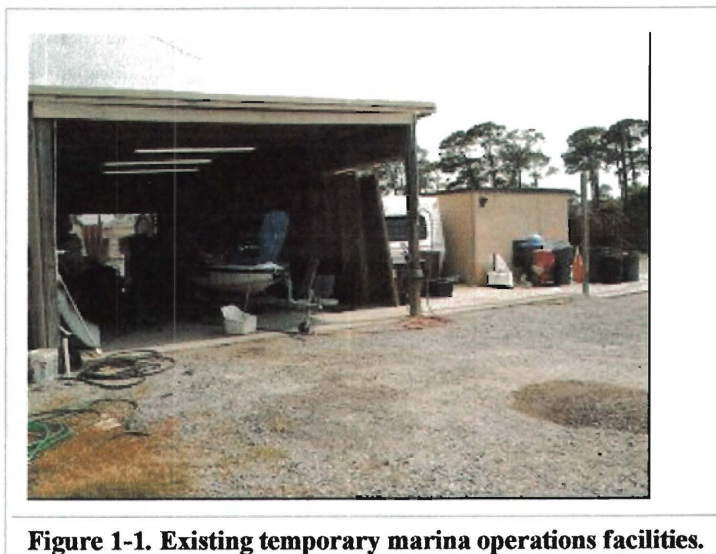


Figure 1-1. Existing temporary marina operations facilities.

The existing fuel storage and dispensing system would continue to be used in its current location under the No Action alternative (Figure 1-2). These structures have been damaged in the past from storm surges due to their location on the Sound and would continue to be vulnerable to damage from future storms. Damage to the structures from storms can result in environmental hazards. For example, during Hurricane Ivan the fuel storage tank floated away resulting in a spill of approximately 1,500 gallons of fuel.

Figure 1-2. Existing fuel storage and dispensing system.

2.4 Proposed Action Alternative

The Proposed Action has two main components: 1) construction of a new marina operations facility and 2) installation of an associated fuel supply system. A summary of each of these components is provided below and additional details are provided in Appendix A. Locations are shown in Figure 1-3. Beach cleaning would also occur as part of the Proposed Action. The beach area adjacent to the marina would be cleaned using an H. Barber Model 850 Sandman walk behind sand sifter or equivalent to perform regular cleaning and maintenance of the beach area (i.e., broken glass, nails, screws, wood splinters, etc.).

Construction to implement the Proposed Action would present common construction hazards and impacts. All construction work on the site would occur within the guidelines of applicable procedures and controls to ensure appropriate industrial safety precautions are followed to prevent accidents and injuries.

Disturbances to soil surfaces would be restored by backfilling, compaction, and re-grading, as appropriate. The majority of the construction activities would take place in previously disturbed areas. The only consumption of nonrenewable resources would be the relatively minor amounts of concrete and metals used and the construction vehicle fuel used. There would be no releases of contaminants to the soil or groundwater from implementation of the Proposed Action. A new storm water treatment area would be constructed next to the building to treat storm water runoff from the building area.

Small amounts of construction waste and debris would be generated during implementation of the Proposed Action. This waste would be surveyed as necessary to ensure that it was free of hazardous constituents and disposed of at approved landfill(s).

Figure 1-3. Proposed construction area location.



2.4.1 Construct Marina Operations Facility

The new marina operations facility would be a 50-foot by 25-foot pre-engineered metal building, located and configured as shown on Figures 1-4, 1-5, 1-6, and 1-7. The building would be constructed slab-on-grade, with a factory finished metal standing seam hip roof colored to match the adjacent teal-colored roofs. Building color would be determined at a later date, but the coating would be factory applied. The one story building would have an exterior wall height of 12 feet. Rain gutters would be installed around the entire perimeter and downspouts would route storm water to the basin to the east of the proposed structure for infiltration. Underground utilities would be installed including electricity, water, wastewater, and telephone to the building.

The building foundation area extending east of the existing parking area would be backfilled and built up to the level of the existing parking area (Figures 1-4, 1-5, and 1-6).

A minimum six-inch thick concrete slab would be poured monolithically with the building slab and would be no less than 12-feet wide and 25-feet long adjacent to the building as shown on Figure 1-7. The 12-foot by 25-foot outdoor pad would be used for boat washing. The concrete slab would be graded to drain at approximately two percent toward a drain and have a two-inch high minimum lip around the entire perimeter of the concrete slab and along the building border to prevent uncontrolled runoff to the surrounding area. Drained liquids would go to an oil water separator then to a sanitary sewer line. Liquids would be contained in the basin by a durable valved outlet that can endure vehicles driving over the valve. The pad would be covered to prevent rainwater from going to the sanitary sewer line.



Figure 1-4. Proposed location.
Construction would occur to the east of the concrete strip that borders the existing unpaved parking area.

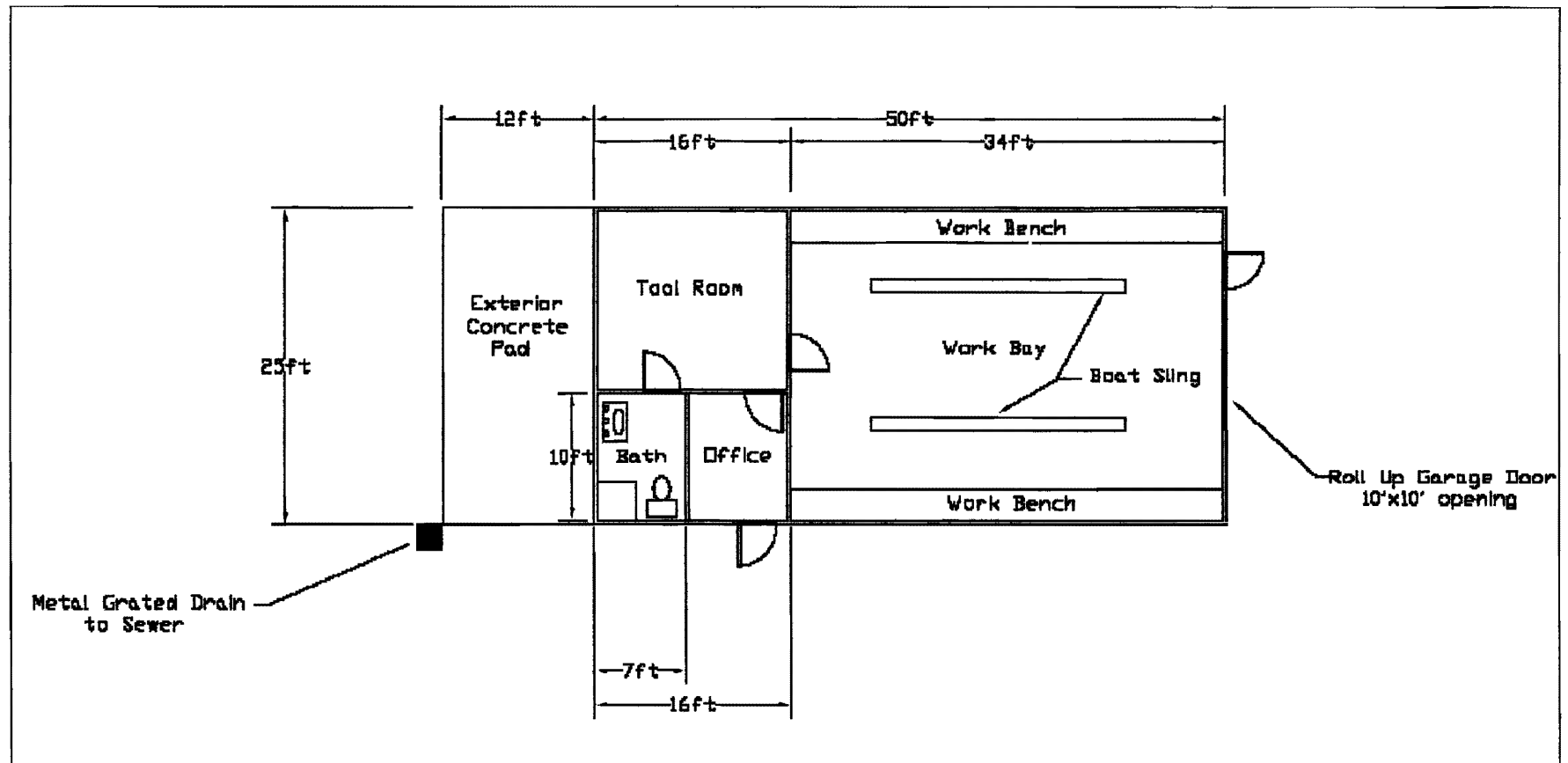


Figure 1-5. Additional view of proposed location.
View is from the existing unpaved parking lot looking south toward the Sound.



Figure 1-6. View to northeast.
Looking into the proposed construction area adjacent to the existing unpaved parking lot. The trees in the foreground would be removed.

Figure 1-7. Marina operations building design.



Fuel constituents would be captured and removed prior to discharge of water to the sanitary sewer. The valved outlet would discharge to a drop inlet entering the sanitary sewer line. The drain would be routed to the base sanitary sewer line as generally shown on Figure 1-7. A removable heavy-duty durable cover and mat would control the flow of storm water into the drain.

All waters generated during construction would be managed by dewatering in accordance with USAF guidance. No water would be discharged directly to the areas that would result in surface drainage to the Sound. Infiltration into the ground is the only discharge method that would occur. The area disturbed by construction would be re-graded to promote natural revegetation.

2.4.2 Install Associated Fuel Supply System

The fuel storage and dispensing system would supply fuel for boating uses associated with the Soundside Marina. For the fuel storage system a 19-foot by 22-foot, eight-inch thick concrete foundation pad would be constructed for the tank and a 14-foot by 50-foot, eight-inch thick concrete secondary containment pad would be constructed for truck unloading. These pads would both be underlain by a 12-inch soil base. A 3,000 to 4,000 gallon double walled aboveground storage tank would be installed at the location shown in Figure 1-8 and identified on Figure 1-9.

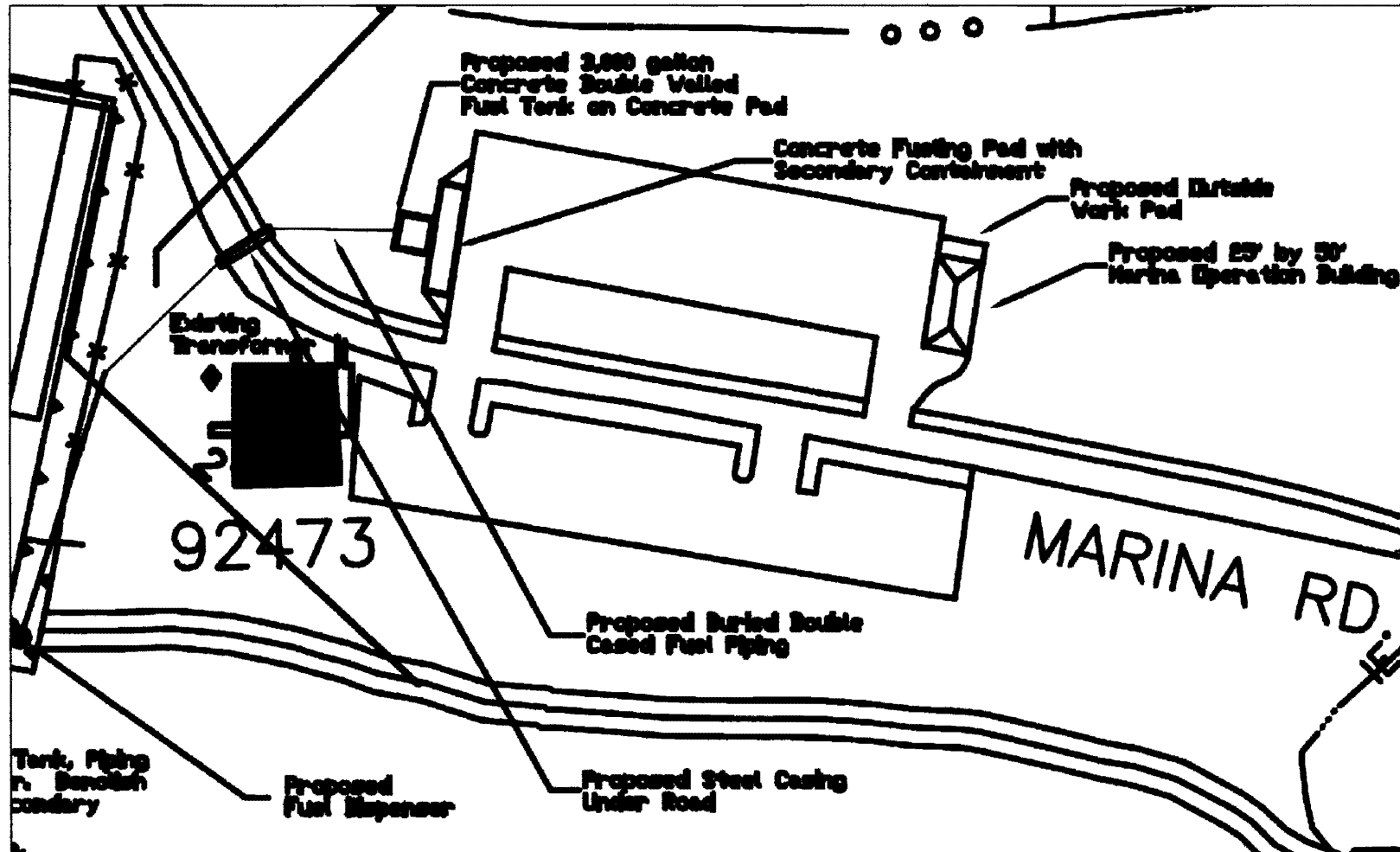
The concrete foundation pad would be poured monolithically with the fuel truck discharge area. The soil under the concrete would be clay material typically used for foundations and subgrade in the local area. The concrete pad would be sloped to a valved outlet that would hold the full length of any truck (typically 2,000 gallons) that would deliver fuel to the aboveground storage tank and any liquid falling from the truck. The lip of the concrete pad would be at least two inches high and the discharge of the valved outlet would be routed to the sanitary sewer. A minimum two-inch diameter valve would be mounted in the concrete pad to control the discharge of liquid from the pad. The valved outlet would be routed to the existing sanitary sewer by curbing. An oil and water separator would be installed to intercept hydrocarbons. Surface runoff from storms would be routed around the sewer inlet by diversion or closure of the grate. During fuel delivery from a truck the valve would be closed. The valve would be open during all other times allowing personnel to capture, remove, and dispose of any fuel from the containment area.

A metal grated drain would be installed adjacent to the concrete pad and a plastic pipe would be used to connect the drain to the existing sewer pipeline. The concrete foundation pad would be constructed in a location to allow direct discharge of the fuel truck into the aboveground storage tank. Underground double walled pipe would exit the 3,000 to 4,000 gallon aboveground storage tank, go under the Marina Road, and terminate at a new dispenser at the marina as shown on Figure 1-9.



Figure 1-8. Proposed fuel storage site.

Figure 1-9. Location of fuel storage and dispenser.

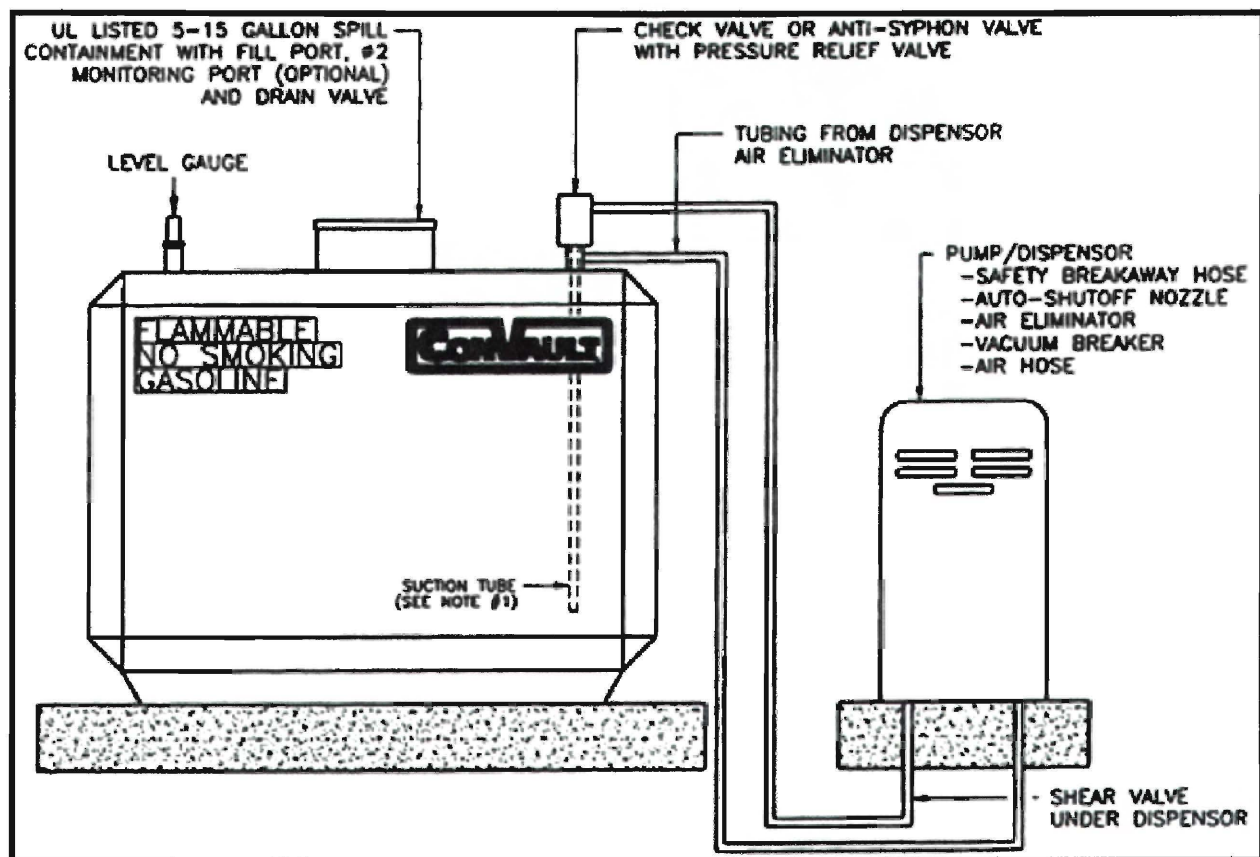


A complete and functional gasoline distribution and dispensing system would be installed to facilitate the sale of fuel to boats at the marina (Figure 1-10). The system would include, but would not be limited to, a dispenser, double-walled underground piping, containment and dispenser sumps, a leak detection and tank level monitoring system with remote annunciation in the Teal House, and a dispensing monitor and control system located in the Teal House. An approximately 3,000 to 4,000-gallon Convault fuel aboveground storage tank would be installed. Figure 1-11 shows the design of a typical storage tank.



Figure 1-10. Proposed fuel dispensing site.

Figure 1-11. Typical drawing of fuel storage tank.



1. BOTTOM OF FOOT VALVE/STRAINER TO BE 1" FROM BOTTOM OF STEEL TANK.
2. STAIRWAY ASSEMBLY TO FILL PORT (OPTIONAL).

Underground electrical power would be provided for all fuel system components requiring a power source. The transformer at the marina building would have the capacity necessary to provide the required power source.

All waters generated by dewatering would be managed in accordance with guidance from the USAF. No water would be discharged directly to areas that would allow surface drainage to the adjacent Sound.

2.5 Project Design Criteria Incorporated Into the Proposed Action

All aspects of the Proposed Action would follow applicable plans, policies, and procedures. All applicable federal, state, and local statutes; USAF/Military instructions, manuals, handbooks, regulations, guidance, and policy letters; EOs; American Petroleum Institute (API) Codes; National Association of Corrosions Engineers (NACE); National Fire Protection (NFPA); Steel Structures and Painting Counsel (SSPC); National Electrical Code (NEC); Uniform Fire Code (UFC); and International Building Code (IBC), including all changes and amendments, would be identified by the contractor and complied with. Base master specifications, which describe expectations for new construction at Hurlburt Field, would be followed. The activities to affect this construction would be performed in a manner that does not negatively impact the operational capabilities of the base and construction would be completed using extremely low site impact methods. All work would be performed in accordance with Hurlburt Field policies including Affirmative Procurement (Green Procurement) and Environmental Protection. Design criteria (including standard BMPs) have been incorporated into the Proposed Action alternative to reduce or prevent undesirable effects resulting from project implementation. A discussion of design criteria is included in Appendix B.

2.6 Comparison of Alternatives

This section summarizes the analytical results that serve to highlight the differences among the alternatives (Table 2-1). Information is focused on activities and effects where different levels of direct effects or outputs can be distinguished among alternatives. This summary assumes that for the Proposed Action alternative, mitigations, BMPs, and project design features specified herein would be implemented, thus reducing the direct effect on the resource. Therefore, in many cases the direct effect of implementing an action is negligible, not of great extent, and/or of temporary duration. Table 2-1 provides a summary comparison of the alternatives' ability to meet the stated purpose and need. Table 2-2 provides a summary of the environmental consequences associated with implementing the identified reasonable alternatives. As demonstrated in Table 2-2, the Proposed Action would not result in significant impacts to the environment. Chapter 4 describes in detail the environmental consequences of the alternatives and presents further comparison of the effects of the alternatives.

Table 2-1. Purpose and Need Criteria Comparison.

Design and Selection Criteria	No Action	Proposed Action
Elevation of Fuel Storage	4.0 feet amsl*	7.5 feet amsl
Elevation of Marina Operations Facility	4.5 feet amsl	7.8 feet amsl
Fuel Storage Distance from Water	25 feet	180 feet
Reduced Potential for Damage from Future Storms	No	Yes
Meets Hurlburt Field Requirements	No	Yes

*above mean sea level

Table 2-2. Alternatives Comparison Matrix.

Environmental Attributes Impacted	No Action	Proposed Action
Topography and Soils	○	⊕
Hydrology and Water Quality	○	⊕
Rare, Threatened, and Endangered Species	○	○
Air Quality	○	⊕
Visual Resources	○	+
Cultural Resources	○	○
Hazardous Waste	○	⊕

+ Positive Effect

○ No Effect

⊕ Minor/Temporary Effect

3 AFFECTED ENVIRONMENT

Chapter 3 sets the framework for understanding the baseline environment – the existing environmental resources of the area that may be affected by the alternatives if implemented. To evaluate the existing environmental setting, a review of available literature, federal and state documents, maps, and records was completed. In addition, an initial site evaluation was performed in February 2005 with a follow up visit in late July 2005.

3.1 General Setting

Hurlburt Field is located in the Florida Panhandle in Okaloosa County, in the region known as the Emerald Coast, which extends approximately 50 miles on either side of Fort Walton Beach and roughly parallels U.S. Highway 98. The installation is about 35 miles east of Pensacola and is within the Eglin Reservation. Primary highway access is via U.S. Highway 98. The installation encompasses approximately 6,634 acres the majority of which lies north of U.S. Highway 98. The Soundside area of the base, that which is south of U.S. Highway 98, contains officer housing, the Soundside Club, the petroleum, oil, and lubricants (POL) marina dock, the installation marina, and other outdoor recreation facilities.

Hurlburt Field is the home of the Headquarters, USAF Special Operations Command; 16th Special Operations Wing; USAF Air Ground School and USAF Special Operations School. Hurlburt Field is comprised of 6,634 acres of grounds (731 acres improved, 834 acres semi-improved, and 5,069 acres unimproved) and is classified as an urban area. Hurlburt Field encompasses over 550 facilities and services necessary to operate and manage the field, including administrative, training, and other traditional military land uses.

The City of Mary Esther, east of Hurlburt Field off U.S. Highway 98, is primarily urban residential and commercial with some industrial activity. Florosa City, west of Hurlburt Field off U.S. Highway 98, contains additional urban residential and commercial areas (Okaloosa County 2001).

The population of over 7,000 active-duty personnel and approximately 800 civilians make up the workforce that fulfills Hurlburt Field's mission of providing the air component of the U.S. Special Operations Command. Hurlburt Field has 680 military family housing units located on the main base, across U.S. Highway 98 and five miles northeast of the main base. Hurlburt Field has a beach club; marina; pool; camping; golf; bowling; tennis and racquetball courts; theater; two fitness centers; skills development center; recreation center; and fishing opportunities. Eglin AFB is located 11 miles away (HF 2005).

Hurlburt Field's climate is warm and subtropical. Annual precipitation is about 62 inches with peak rainfall occurring in July and August; October and November are usually the driest months. The region is subject to numerous tropical storms and hurricanes generally from June through November. The portion of Hurlburt Field principally south of U.S. Highway 98 and bordering Santa Rosa Sound occurs in a storm surge area, subject to high water due to seawater blown inland during storms. According to the National Weather Service, Category 1 storms, the least violent, occur on average once every ten years, Category 2 storms occur in the region about every 27 years. The storm surge elevation of these two storm categories is 3.5 feet and 5.0 feet respectively. Category 3 storms occur about once every 42 years on average and have a storm surge elevation of 10.5 feet.

In Hurricane Opal (1995) the storm surge elevation was approximately at the 8.5-foot contour line. Between 1996 and 2000 there were three hurricanes and one tropical storm in the area, the worst of which was Hurricane Georges with sustained winds of 52 mph and gusts to 79 mph and approximately 17 inches of rain. Hurricane Ivan hit the area in 2004 and Hurricane Dennis just recently occurred (July 2005). Hurricane Ivan was a Category 3 storm when it made landfall in Alabama resulting in a ten to 15 foot high storm surge along the coasts from Destin, Florida (east of the project area) westward to Mobile Bay, Alabama. In Okaloosa County the storm surge measured from six to nine feet high (NHC 2005).

3.2 Topography and Soils

Hurlburt Field is located in the northwestern region of Florida, which is characterized by the gentle plateaus, rolling uplands, and deep stream valleys of the Western Highlands Province. The area is generally characterized as a fluvial drainage basin component; it collects, concentrates, and promotes the movement of water and sediment. The area has an underlying Citronelle Formation, which is discontinuous and primarily comprised of fine to coarse-grained sand with some gravel and relatively thin clay. The Alum Bluff Group and Pensacola Clay underlay the Citronelle Formation. Miocene and Oligocene age limestone lie under these units. All of the units slope southward toward the Gulf of Mexico (USGS 1990).

Hurlburt Field's topography is relatively flat. Elevations range from sea level along Santa Rosa Sound to about 40 feet amsl in the northeastern portion of the installation. Elevation at the project area ranges from about 4.0 to 7.8 feet amsl. Soils occurring in the southern portion of Okaloosa County are gently sloping, moderate to poorly drained, and are normally sandy with a dark, sandy subsoil. Hurlburt Field soils are derived from sedimentary deposits of fluvial and marine origin. Erosion potential for soils on the installation is considered slight due to the relatively level topography, except along Santa Rosa Sound, which is considered to be moderate (USAF 2001). The soil of the project area is of the Newhan-Corolla association. This association is characterized as nearly level to strongly sloping, excessively, moderately well, or somewhat poorly drained soils that are sandy throughout. These deep soils parallel the Gulf of Mexico and extend across the county in an east-west direction. Newhan and Corolla soils are typically sand to a depth of 80 inches or more (NRCS 1995).

3.3 Hydrology and Water Quality

The water resources of the northwestern region of Florida include groundwater and aquifers, streams, springs, and rivers, open water areas such as lakes, bays, and bayous, and the Gulf of Mexico. Characteristics of the hydrologic systems of the project area are discussed below.

3.3.1 Ground Water

The northwestern region of Florida contains the Sand and Gravel Aquifer and the Floridan Aquifer. The Sand and Gravel Aquifer is primarily composed of fine to coarse sand, gravel, silt, and clay with some peat; moderately to highly permeable with an underlying confining unit; and mainly used for irrigation and agricultural purposes. Groundwater movement is generally downward to the Gulf of Mexico and the water table ranges from a few feet to 50 feet below land surface. Recharge occurs through precipitation infiltration in the westernmost part of Florida's panhandle and in southern Alabama (USGS 1990).

The Floridan Aquifer underlies the confining layer of the Sand and Gravel Aquifer and the entire state of Florida. It is one of the most productive sources of water in the United States; provides

water for public, industry, agriculture, and rural uses; and is the main source of potable water for Okaloosa County. The highly permeable aquifer is divided into the Upper and Lower Floridan aquifers, separated by a less-permeable confining unit. Groundwater movement in the aquifer is generally perpendicular to the contour of the surface, flowing coastward and outwards from central Florida. Recharge of the Floridan Aquifer takes place throughout more than half of its area; however, recharge from surface water or precipitation is negligible where the system is confined, such as in Florida's western panhandle (USGS 1990).

3.3.2 Surface Water

Hurlburt Field is comprised of numerous streams, swamps, ponds, and wetlands along with roughly two miles of Santa Rosa Sound shoreline. The Santa Rosa Sound is an estuarine lagoon between the mainland and Santa Rosa Island. Santa Rosa Sound connects Pensacola Bay to the west with Choctawhatchee Bay to the east. In general, surface water in the southern portion of Hurlburt Field drains into the Santa Rosa Sound and water in the northern portion drains into East Bay Swamp. Hurlburt Field has a series of drainage ditches and storm water drainage basins to aid water infiltration and sediment filtration. Storm water retention/detention basins intercept drainage to Santa Rosa Sound (USAF 2001). There is a Storm Water Pollution Prevention Plan (SWPPP) in place for Hurlburt Field that identifies all industrial and other potential sources of non-point source pollutants occurring within Hurlburt Field's 11 distinct drainage basins. The SWPP was developed in accordance with AFI 32-7041, Water Quality Compliance, and in compliance with the U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) Storm Water Permit. The use of BMPs is required to prevent storm water pollution from construction sites.

Floodplains have been delineated for Hurlburt Field; the 100-year floodplain is the elevation that becomes inundated by rising waters and has a one percent chance of flooding every year. There are extensive 100-year floodplains in the northern portion of the installation; and the project area is in a 100-year floodplain (Figure 3-1). A floodplain/storm surge fringe exists where the installation borders Santa Rosa Sound. This area is classified as a floodplain due to its potential to flood during heavy storm surges, such as those occurring during hurricanes. Flooding occurs only during very heavy storm surge conditions because the slope from the shoreline into most of the project area is relatively steep.

There are approximately 3,430 acres of wetlands on Hurlburt Field. They were delineated in the mid 1990s (as directed by AFI 32-7064 that requires development and maintenance of current inventories of wetlands) and confirmed by the USACE and the FDEP. There is a strong correlation between areas mapped as wetlands and the 100-year floodplain (USAF 2001). The majority of these wetlands are located in the northern portion of Hurlburt Field; however, some isolated wetlands occur in the southern portion. Wetlands shown on Figure 3-1 adjacent to the project area were surveyed by the USACE in 1998 but the FDEP never claimed them as wetlands. This designation of the area as a wetland has been questioned by Hurlburt Field environmental personnel who believe the area was misidentified or that a change in hydrology has changed the status of the area. Hurlburt Field is working with the USACE on a re-determination of the area.

Figure 3-1. Wetland and floodplain delineations for the project area.



3.4 Rare, Threatened, and Endangered Species

The northwestern region of Florida is rich in biodiversity, with numerous native plant and animal species present. Rare plant and animal inventories were conducted on Hurlburt Field in 2002-2003. Of the plant and animal species identified on Hurlburt Field, a total of 16 species are federally and/or state listed as threatened and endangered, Tables 3-1 and 3-2.

3.4.1 Fauna

Due to the variety of habitats found in the region there is a rich diversity of game and non-game wildlife. Comprising the terrestrial vertebrate fauna at Hurlburt Field are many species of amphibians, reptiles, mammals, and resident and migratory birds. The majority of the critical terrestrial fauna habitat (several aquatic species occur along Santa Rosa Sound) occurs in the western portion of the installation where pine flatwoods and cypress dome wetlands are present.

Surveys conducted in the 1990s identified 17 rare animal species on Hurlburt Field. Additional surveys were conducted in 2002-2003 and the Florida black bear was added to the list of species present (Table 3-1). Only two federally listed threatened and endangered species managed under the Endangered Species Act (ESA) have been identified within the confines of Hurlburt Field. Additionally, two state listed vertebrate species and two state species of concern were suspected. Based on the latest survey information, no threatened and endangered animal species, species of concern, or critical habitat have been identified within the project area. Bald eagles, a federally threatened species, are occasionally observed flying over the installation and the Sound but no nests occur within the vicinity (USAF 2001). Neotropical migratory birds may use adjacent shoreline habitat and habitat on the barrier island. The project area is developed and the existing land/recreation use diminishes the quality of habitat present.

Table 3-1. Rare Fauna (Adapted from Hurlburt Field INRMP 2002 and Rare Plant and Animal Inventory of Air Force Special Operations Command, Hurlburt Field, Florida 2003).

Species Common Name	Scientific Name	Federal Status	State Status
Bachman's Sparrow	<i>Aimophila aestivalis</i>	*	—
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	T
Brown Pelican	<i>Pelecanus occidentalis</i>	—	SSC
Coal Skink	<i>Eumeces anthracinus</i>	—	—
Crooked Silky June Beetle	<i>Serica rhypha</i>	—	—
Flatwood's Salamander	<i>Ambystoma cingulatum</i>	T	T
Florida Black Bear	<i>Ursus americanus floridanus</i>	—	T
Fly Species	<i>Nemomydas jonesi</i>	—	—
Grasshopper Species	<i>Gymnoscartetes morsei</i>	—	—
Great Egret	<i>Ardea alba</i>	—	—
Least Tern	<i>Sterna antillarum</i>	—	T
Osprey	<i>Pandion haliaetus</i>	—	—
Panhandle Beach Scarab	<i>Polylamina pubescens</i>	—	—
Peter's Little Sister Sedge	<i>Cheumatopsyche petersi</i>	—	—
Reddish Egret	<i>Egretta rufescens</i>	*	SSC
Shining Ball Scarab	<i>Ceratocanthus aeneus</i>	—	—
Southeastern Spinyleg Dragonfly	<i>Dromogomphus armatus</i>	—	—
Zigzag Caddisfly	<i>Agarodes ziczac</i>	—	T

Threatened (T); Not Listed (—); Species of Special Concern (SSC); Endangered (E); De-Listed (*)

3.4.2 Flora

Native vegetation at Hurlburt Field is dominated by longleaf, sand, and slash pine ecosystems with an understory of various species, including oak and magnolia, and herbaceous groundcover. The greatest densities of threatened and endangered plants occur in the western portion of the installation where wet flatwoods, cypress domes, and other wetlands are common.

Surveys conducted in the 1990s identified 18 rare plant species on Hurlburt Field. Eleven of these were state listed as threatened or endangered but none were federally listed. In 2002-2003 additional surveys were conducted and two additional rare species were identified (hairy wild indigo and many-flowered grass pink) (Hipes and Norden 2003) (Table 3-2).

The latest survey conducted indicates no threatened and endangered plant species, species of concern, or critical habitat are present within the project area. The project area is disturbed from past activity and current land use and consists mainly of sandy sites with little vegetation.

Table 3-2. Rare Flora (Adapted from Hurlburt Field INRMP 2002 and Rare Plant and Animal Inventory of Air Force Special Operations Command, Hurlburt Field, Florida 2003).

Species Common Name	Scientific Name	Federal Status	State Status
Carolina Lilaeopsis**	<i>Lilaeopsis carolinensis</i>	—	—
Chapman's Butterwort	<i>Pinguicula planifolia</i>	*	T
Curtiss' Sand Grass	<i>Calamovilfa curtissii</i>	*	T
Drummond's Yellow-Eyed Grass**	<i>Xyris drummondii</i>	*	—
Grass Pink	<i>Calopogon tuberosus</i>	—	—
Grass-Leaf Ladies' Tresses	<i>Spiranthes praecox</i>	—	—
Gulf Rockrose**	<i>Helianthemum arenicola</i>	—	—
Gulfcoast Lupine	<i>Lupinus westianus</i>	*	T
Hairy Wild Indigo	<i>Baptisia calycosa</i> var. <i>villosa</i>	MC	T
Many-Flowered Grass Pink	<i>Calopogon multiflorus</i>	MC	E
Netted Chain Fern	<i>Woodwardia areolata</i>	—	—
Parrot Pitcherplant	<i>Sarracenia psittacina</i>	—	T
Purple Pitcherplant	<i>Sarracenia purpurea</i>	—	T
Rose Pogonia	<i>Pogonia ophioglossoides</i>	—	T
Rosebud Orchid	<i>Cleistes divaricata</i>	—	T
Southern Red Lily	<i>Lilium catesbaei</i>	—	T
Water Sundew	<i>Drosera intermedia</i>	—	T
West Florida Cowlily	<i>Nuphar lutea</i> ssp. <i>ulvacea</i>	*	—
White-Fringed Orchid	<i>Plantanthera blephariglottis</i>	—	T
White-Top Pitcherplant	<i>Sarracenia leucophylla</i>	*	E

Threatened (T); Not Listed (—); Management Concern (MC); Endangered (E); De-Listed (*)

** These species are no longer considered rare in the State of Florida.

3.5 Air Quality

A review of air quality for the general project site was completed utilizing the National Ambient Air Quality (NAAQ) database maintained by the EPA (EPA 2002). The NAAQ database details whether a particular area is in attainment for six criteria air pollutants. Florida is in attainment of established National Ambient Air Quality Standards (NAAQS) for all six air quality parameters identified by the EPA. Four sources of air emissions (the engine test stand; paint booths, a jet fuel storage tank, and generator use in an exercise area) are regulated at Hurlburt Field under a synthetic minor air operation permit issued by the State of Florida (USAF 2001).

3.6 Visual Resources

The visual resources of the area were assessed by field observations of the project area and through the interpretation of aerial photographs. The project area is relatively flat and immediately adjacent to trees to the east, trees and base housing to the north, the existing parking area to the west, and the beach area to the south. The immediate area is surrounded by residential properties (neighborhood setting) to the north and to the west of the marina. The project area is already highly developed and the general area continues to be developed for residential, recreational, and base mission activities. Visually, as one drives west parallel to the beach toward the marina and the project area, the visual characteristics change. Closer to the marina there are fewer trees and increased amounts of development (e.g., parking lots, buildings, boat docks, etc.). The area proposed for construction of the new marina operations building is adjacent to an unpaved parking lot and the areas proposed for the associated fuel storage and dispensing system are sandy areas adjacent to existing development.

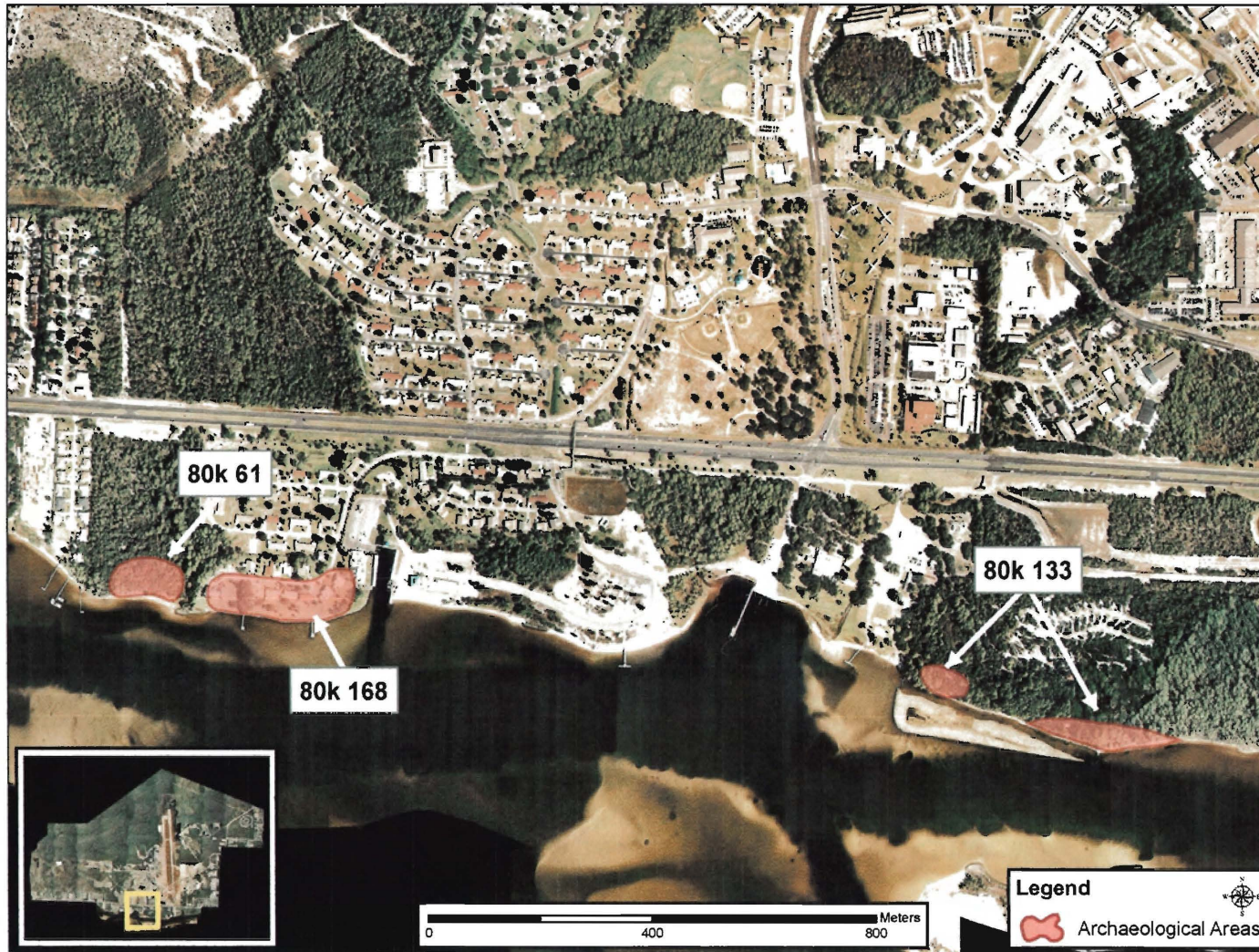
3.7 Cultural Resources

Historic properties are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. A variety of laws, regulations, and statutes seek to manage or protect such resources. Section 106 of the NHPA requires federal agencies to take into account the potential effects of proposed projects on historic properties listed on or potentially eligible for the NRHP.

Historical and archeological surveys conducted prior to 1994 identified nine archeological sites at Hurlburt Field. Additional investigations conducted in 1997 established five of these sites as eligible for listing in the NRHP and Hurlburt Field prepared and submitted nomination forms in 1998. Hurlburt Field has established high and low probability zones for locating cultural resources to ensure the preservation of cultural resources.

The Santa Rosa Sound shoreline contains the most sensitive archaeological resource sites known on the installation. In the past these sites have been threatened by shoreline erosion but considerable efforts have been made to stabilize the area and protect the resources present. Cultural resources surveys have been conducted for the entire area south of U.S. Highway 98 and coordination with SHPO has occurred. The closest significant sites are over 1,000 feet from the project area – these are sites that have been determined to be eligible for listing on the NRHP. Site number 80K61 is the closest significant site west of the project area and 80K133 is the closest significant site east of the project area (Figure 3-2). Site 80K61 is 9,000 square meter site that contains both historic and prehistoric occupations. The prehistoric component is comprised of several shell middens associated with the Deptford, Santa-Rosa Swift Creek, and Weeden Island occupations of the site. Site 80K133 is a linear site approximately 280 meters in length and approximately six hectares in size that is comprised of intact shell deposits associated with the Deptford and Early Weeden Island occupations (Woolpert 2002a). Site 80K168 is located over 400 feet west of the proposed project site (Figure 3-2). The integrity of this site was severely impacted during a housing construction project in the 1950s and has since been found to be ineligible for listing in the NRHP.

Figure 3-2. Archaeological locations near the project area.



3.8 Hazardous Waste

Hurlburt Field, a large-quantity hazardous waste generator (EPA identification number FL7570024375), has a Hazardous and Special Waste Management Plan in place to ensure proper handling, accumulation, and disposal of all hazardous/special wastes generated at the facility. The Plan defines requirements for hazardous waste management as outlined in AFI 32-7042, RCRA, and Florida Hazardous Waste Management Rules. There are 90-day accumulation points on the installation where hazardous materials are stored before being transported to treatment facilities off site. The maintenance and operation of aircraft are the main sources of hazardous wastes generated at the facility. Storage, use, and transport of hazardous materials and wastes on the installation present a slight hazard to natural ecosystems in the area.

The marina currently has a 2,000-gallon MOGAS aboveground storage tank located adjacent to the Santa Rosa Sound. This would be moved to a higher elevation under the Proposed Action. Fuel spills at the marina and other locations on the installation have the potential for entering the Santa Rosa Sound. However, secondary containment structures, curbing, and other preventative measures are in place to contain foreseeable spills.

4 ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential changes to the environmental resources due to implementation of the alternatives and presents the scientific and analytical basis for the comparison of alternatives summarized in Table 2-2. The consequences to the affected resources from the No Action alternative are described first, followed by the consequences from the Proposed Action alternative.

Cumulative effects are also presented in this chapter. Cumulative effects are the effect on the environment that results from the incremental effect for the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions (40 CFR § 1508.7).

4.1 Topography and Soils

4.1.1 No Action

No ground disturbance would occur under the No Action and therefore no direct impacts to soils or topography would result. Indirect effects could result from performing maintenance activities in the temporary facilities currently utilized. Soil contamination could result from spills that may occur if maintenance activities are performed outside.

4.1.2 Proposed Action

Construction of the new marina operations building and associated fuel storage and dispensing system would have a minor impact on topography. The sloped area adjacent to the existing unpaved parking lot would be graded to create a level building surface for the new building. Minor grading would also occur at the locations where the fuel storage and dispensing system would be installed.

Soil disturbance would occur related to construction. The topography of the area is relatively flat and the potential for soil erosion is considered to be slight. The removal of a few existing trees during construction is not expected to result in an increase in erosion within the project area because of the relatively flat topography.

BMPs and design criteria would minimize the potential for effects. Erosion control procedures would be incorporated prior to soil disturbance and after construction. These would include: minimizing the area and duration of soil-disturbing work; retarding runoff using silt fences or other acceptable temporary structures; installing sediment traps; and protecting against discharge of fuels and other pollutants during implementation. BMPs would be inspected by Hurlburt Field environmental personnel prior to use. Additional BMPs and design measures are discussed in Appendix B. Effects to soils from the Proposed Action would be negligible.

4.2 Hydrology and Water Quality

4.2.1 Groundwater

4.2.1.1 No Action

No ground disturbance would occur under the No Action alternative and therefore no direct impacts to groundwater would result. Indirect effects could result from performing maintenance

activities in the temporary facilities currently utilized. Soil contamination could occur and pollutants could enter groundwater.

Additionally under the No Action alternative it is more likely that the current fuel storage and dispensing system could be impacted by storms. A large storm could result in damage to the structures and ultimately in a fuel spill that could contaminate groundwater.

4.2.1.2 Proposed Action

The use of hazardous materials during construction (i.e., fuel, cement curing aids, sealants, and fill used from other areas) could, if not properly handled, cause effects to groundwater sources. Operation of the fuel storage and dispensing system also presents the potential for impacts to groundwater in the event of a spill. BMPs would be in place during construction and project design protects against spills during operation to minimize the potential for impacts to groundwater. The concrete containment pad that would be constructed would hold the full length of any truck that would deliver fuel to the aboveground storage tank.

The quantity of groundwater recharge at the project sites would also be impacted although only minimally. Decreased infiltration could be caused by the compaction effect of heavy machinery and/or materials used during construction. Groundwater recharge could decrease due to increased impervious areas. This increase in impervious area would have an insignificant impact on the quantity of groundwater being recharged because of the small percentage of area affected.

4.2.2 Surface water

4.2.2.1 No Action

Under the No Action alternative no direct effects to surface water would be expected. However because the facilities are more vulnerable to storms in their current locations it is more likely that the current fuel storage and dispensing system could be damaged resulting in a fuel spill that could contaminate surface water. During Hurricane Ivan the fuel storage tank floated away and resulted in a spill of approximately 1,500 gallons of fuel.

4.2.2.2 Proposed Action

Hurlburt Field is authorized to discharge storm water and industrial wastewater into a sanitary sewer system. All permitting requirements involving the CWA § 404 and Florida 401 Water Quality Certification would be reviewed and implemented where applicable.

Construction activities would be a temporary source of pollution and sediment loading that could result in a temporary, minor impact on surface water quality. Because of its location away from any surface water it is not expected that construction of the new marina operations building would affect any surface water bodies. Construction of the new fuel storage and dispensing system has the potential to affect water quality due to increased sediment loading and a potential change in chemical composition from fuel leaks and spills, chemical spills from construction materials, etc. BMPs would be put in place and would effectively reduce the potential for any water quality effects.

An increased impervious area (due to heavy machinery used during construction) could cause an increase in surface water runoff. This increased runoff, along with the use of hazardous materials during construction, could increase the amount of contaminants that could move throughout the

drainage system in surface water. This contaminant runoff, as well as the other potential effects would be minimized through the use of BMPs during construction.

Wetlands were identified adjacent to the project area. Evaluation of potential wetland impacts and actions to avoid adverse effects would need to be reviewed during final design of the project site. Any changes to the final design would be reviewed to avoid and minimize any encroachments and impacts to wetland resources. If avoidance and minimization efforts fail to avoid or minimize wetland impacts, then mitigation of wetland impacts would be necessary. No wetland impacts would occur due to operation of the proposed facilities.

4.3 Rare, Threatened, and Endangered Species

4.3.1 No Action

No impacts to rare, threatened, and endangered species would result from the No Action alternative.

4.3.2 Proposed Action

Construction impacts to wildlife would be negligible due to the lack of important wildlife habitat in the project area. The area is disturbed and the current land uses are not consistent with high quality habitat characteristics. Terrestrial mammals, if present in adjacent forested areas west of the parking area, may be affected by construction activity and may avoid the area in the short term.

Adverse effects due to the loss of cover would be minor. Some trees would be removed but they are immediately adjacent to a developed area and therefore do not provide important habitat. Abundant habitat exists in the forested area east of the parking area and further east along the Sound. Operation of the proposed facilities would not cause additional effects.

No effects to special status plant species would occur because none are present in the project area.

4.4 Air Quality

4.4.1 No Action

No effects to air quality beyond those that may be occurring from current maintenance activities would be expected under the No Action alternative. Current activities may result in air emissions but these are not expected to be significant and would not affect air quality in the project area.

4.4.2 Proposed Action

This project would require the use of material-handling and earth-moving equipment during construction, which would result in two main effects on air quality: an increase in emissions by heavy construction equipment and an increase in dust by construction activities. Dust and exhaust particulate emissions from heavy equipment operations would temporarily degrade air quality in the immediate construction zone until construction is completed.

Preventative measures would be incorporated into on-site work practices including: use of water or chemical dust suppressants during tree removal and grading; application of dust suppressants to cover any stockpiled soil and other materials; and removal of soil tracked onto paved street or parking surfaces by equipment. The incremental effects of dust, vehicle exhaust emissions, and equipment heat rejection on the local air quality would be negligible.

No significant impact on local or regional air quality is expected from operation of the new fuel storage and dispensing system or the marina operations building beyond that which is currently occurring from use of the existing facilities. Normal operation of the proposed facilities would not be expected to have an impact on air quality.

4.5 Visual Resources

4.5.1 No Action

The temporary maintenance facility does not match the visual character of other facilities in the area and may detract from the aesthetics of the area. No changes to visual resources would result under the No Action alternative.

4.5.2 Proposed Action

Construction of the new facilities would change the appearance of the existing project area landscape. The visual changes are considered to be a positive improvement. Visual benefits involved with the Proposed Action include observed improvements to the area by the elimination of the temporary maintenance facilities and by improved landscaping. Changes to the physical appearance in this area would result from construction of the building and the associated fuel supply and dispensing system. The architecture of the structures would match other facilities in the area and enhance the local landscape. The building would be visible from the backyards of the residential area north of the project area. Trees would be planted to the north of the building to provide a vegetative buffer between the facility and the residential area.

4.6 Cultural Resources

4.6.1 No Action

No cultural resources are known to occur in the project area. No effects would result from the No Action alternative.

4.6.2 Proposed Action

Cultural resources surveys have been conducted for the entire area south of U.S. Highway 98 and coordination with SHPO has occurred. No previously recorded historic resources, or NRHP – listed or – eligible properties are present within the project area. Cultural resource monitoring would be required during all subsurface disturbance activities. If previously-unidentified cultural resources are discovered after construction has begun, work would be directed so as not to affect the property and the provisions of the emergency discovery requirements of 36 CFR 800.11 would be put into effect. If Native American human remains and cultural items are encountered, work would cease for 30 days while consultation with appropriate parties takes place. Appendix B contains additional information about measures required for the Proposed Action.

4.7 Hazardous Waste

4.7.1 No Action

Under the No Action alternative no new hazardous materials would be introduced because construction activities would not occur. Fuel spills from the existing MOGAS aboveground storage tank at the marina and from boat maintenance operations have the potential for contaminating soils. Secondary containment structures, curbing, and other preventative measures

are in place to contain spills reducing the potential for impacts. Due to the location of the current fuel storage and dispensing system fuel spills could occur as a result of damage from hurricanes.

4.7.2 Proposed Action

Some hazardous materials (i.e., fuel, cement curing aids, sealants, etc.) would be used during construction. BMPs would be in place during construction and project design protects against spills during operation to minimize the potential for impacts from hazardous materials.

Hazardous waste associated with construction activities would be managed and disposed of in accordance with all federal and state regulations. Hurlburt Field's Hazardous and Special Waste Management Plan provides guidance for proper handling, accumulation, and disposal of all hazardous/special wastes generated at the facility. Hazardous materials may be stored at the facility's 90-day accumulation points before being transported to treatment facilities off site. Operation of the fuel storage and dispensing system also presents the potential for spills and contamination. The containment pad, curbing, and other preventative measures minimize the potential for any impacts.

4.8 Additional Disclosures

Irreversible commitments are those that cannot be reversed, except in the extreme long-term, and irretrievable commitments are those that are lost for a period of time. The use of fossil fuels for equipment represents an irreversible commitment of resources. There are no foreseeable irretrievable commitments of resources associated with the Proposed Action. No unavoidable adverse effects are anticipated from implementation of the project. Energy requirements and conservation measurements would not be affected.

4.9 Cumulative Effects

Cumulative effects are the impact on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions (40 CFR § 1508.7). A variety of construction and recreational activities occur and are occurring near the project area that may result in minor impacts to the resources. Because these activities are occurring in the same general area, they have the potential to contribute to cumulative effects.

Cumulative effects take into consideration the impacts of the Proposed Action in combination with past development, existing expansion projects, and future development, and assess the effects on the environment. As Hurlburt Field's role in special operations continues to grow so does the infrastructure at the installation. Projected growth is examined in the Hurlburt Field General Plan (Woolpert 2002b). Continued development at Hurlburt Field will be constrained by the presence of wetlands, critical habitat, and off-base development.

Recreation activities and associated facility development is proposed to increase on the south shore according to the Hurlburt Field General Plan. Several projects are occurring or are planned for the area including additional housing development, 24 trailer/camper sites in the FAMCAMP area, a 120-room hotel/conference center close to the existing Officers' Club, and a training/classroom building east of the existing Teal House. Marina expansion is also occurring and could include several different projects if funding becomes available in the future. At this time a boat ramp is scheduled for construction this year east of the project area and a boat trailer parking lot could also be constructed. A road realignment is also proposed but the timeframe for this project is unknown. Other potential actions include a dock/board walk and development of areas for sand volleyball and other recreation activities (Carl Hoffman, Personal Communication 2005).

The ongoing construction projects currently being implemented, the Proposed Action, and foreseeable future actions would not have a permanent degradation effect on resources. Some activities are occurring now, some will be occurring in the near future, and the timeframes for others are unknown. As a result of these activities there may be an increase in the number of people present in the area during the daytime hours and this could potentially lead to inadvertent impacts to resources. These actions also have the potential to create soil erosion and storm water runoff problems but proper planning and implementation of BMPs would reduce the potential for effects. Additional development in the Soundside area will require special attention to protect resources and mitigate any damages. Past development on Hurlburt Field resulted in an agreement with the USACE and the FDEP to conserve and enhance a majority of the wetlands on Hurlburt Field. Therefore, design and planning of the Proposed Action and all future actions must make every effort to avoid permanently disturbing existing wetlands and conserve natural resources.

The Proposed Action, past actions, ongoing actions, and foreseeable future actions at Hurlburt Field would not have significant cumulative impacts on the environment. Use of BMPs effectively reduces the potential for significant effects. The majority of the planned activities are occurring to the east of the Proposed Action and therefore would not affect the same area. In addition, the Proposed Action and future actions would have a positive benefit on the economy of the surrounding area by continued and new employment opportunities.

5 CONSULTATION/COORDINATION

5.1 Public Involvement

Hurlburt Field invites public participation in the NEPA process. All agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision making process.

Hurlburt Field issued a draft FONSI and FONPA indicating that no significant adverse impacts were identified in the EA. A 30-day comment period was held during which time agencies and the public were invited to submit comments on the Proposed Action, the EA, or the draft FONSI/FONPA. The public review period was announced in a public notice in the Northwest Florida Daily News, Fort Walton Beach, Florida. Copies of the EA were sent to the Florida State Clearinghouse for a determination of consistency with the FCMP. Hurlburt Field received a determination of consistency from the Clearinghouse. Comments and correspondence are contained in Appendix C. Upon consideration of comments received, Hurlburt Field is approving the FONSI/FONPA and implementing the Proposed Action.

Throughout this process, the public may obtain information on the status and progress of the Proposed Action and the EA through the Hurlburt Field Public Affairs Office at (850) 884-6199 or the Hurlburt Field Environmental Flight at (850) 884-7921.

5.2 Persons or Agencies Consulted

Philip Pruitt	Hurlburt Field Environmental
Carl Hoffman	Hurlburt Field Chief of Base Development
Robin Armhold	Hurlburt Field Environmental
Amy Gilmore	Hurlburt Field Environmental
Mary Hartshorn	USACE, Pensacola, Florida
John Hollingshead	Supervisor – Florida Department of Health, Okaloosa County; AST permitting and removal
Frederick P. Gaske	SHPO
Gail Carmody	United States Fish & Wildlife Service

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- Woolpert LLP. 2002b. Hurlburt Field General Plan. Prepared by Woolpert LLP, Dayton Ohio.

APPENDIX A – Proposed Action Details

Construct Marina Operations Facility

The new marina operations facility would be a pre-engineered metal building constructed slab-on-grade, with a factory finished metal standing seam hip roof colored to match the adjacent teal-colored roofs. Exterior building color would match the base exterior painting standards (presumably light tan). The exterior would be factory coated. The one story building would have an exterior wall height of 12 feet. Rain gutters would be installed around the entire perimeter and downspouts would route storm water to the basin to the east of the proposed structure for infiltration.

The metal trusses supporting the roof would be configured to allow boats to be raised on the interior boat sling to extend into the roof area approximately two feet at the center; thus, maximizing work height under the 12-foot high sling frame.

The building would be climate control with insulated walls and ceilings. The maintenance bay would be heated and ventilated and the office area would be heated and cooled. Underground utilities would be installed including electricity, water, wastewater, and telephone to the building. Metallic tape would be placed above all nonferrous piping buried in the ground. The contractor would confirm the location and capacity of utilities.

The building foundation area extending east of the existing parking area would be backfilled and built up to the level of the existing parking area. Backfill would consist of a clay material typically used for foundations and subgrade in the local area or granular fill from on site. Maximum slope on the backfill to the existing ground surface would not exceed a 3H:1V slope. Backfill would be compacted to 95 percent of the standard maximum dry density and from zero to minus three percent of the optimum moisture content as determined from ASTM D698. The laboratory data and compliant field compaction results would be submitted for approval to the USAF prior to placement of concrete.

Adjacent to the building an exterior concrete pad would be poured monolithically with the building slab. The pad would be approximately 12-foot by 25-foot and a minimum of six-inches thick. Welded wire fabric would be placed in the concrete slab. The concrete slab would drain at approximately two percent toward the drain and have a two-inch high minimum lip around the entire perimeter of the concrete slab and along the building border to prevent uncontrolled runoff to the surrounding area. The outdoor pad would be covered to keep rainfall out. Liquids contained in the basin would be contained by a durable valved outlet that can endure vehicles driving over the valve. Fuel constituents would be captured and removed prior to discharge of water to the sewer. The valved outlet would discharge to a drop inlet entering the sewer line. The drain would be routed to the base sewer line as generally shown on Figure 1-7. A removable heavy-duty durable cover and mat would control the flow of storm water into the drain. The exact locations, pipe size, and capacity of the sewer system would be confirmed by the contractor prior to construction and connection.

The layout of the building interior would conform to that shown in Figure 1-7. The tool room, office, and bath would be finished inside with finished dry wall on the walls and ceilings. Drywall would be primed and painted with a color to be determined. The office and bathroom would have ceramic tile floors and the tool room would be a smooth finish slip resistant

concrete. Tile installed in the bath would be approximately four feet in height from the floor and drywall would be used above the tile to ceiling height. Lighting and all utilities such as water, wastewater, electricity, and telephone would be provided to the interior space.

The interior work bay would have a boat hoist/sling with the capability of lifting any of the marina's boats. The hoist would be electrically powered. The maximum height of the frame for the boat hoist would not exceed 12 feet. Shop drawings for the proposed system would be prepared and submitted for USAF approval prior to purchase and installation of the system.

The interior of the work bay would be insulated but not finished with an interior wall system. Work benches with shelves and cabinets would be installed along the sides of the work bay as shown in Figure 1-7. Outside access to the work area is provided by a ten-foot by ten-foot overhead rollup door and a standard seven-foot by three-foot metal door. Adequate lighting would be provided to all work areas and on the underside of a suspended boat. In addition to the 120-volt electrical system, a total of three 50-ampere, 240-volt receptacles would be installed in the work bay and tool room for welding equipment.

Dewatering, if required, would be managed in accordance with guidance from the USAF and state regulators. No water would be discharged directly to areas that would result in surface drainage to the Sound. Infiltration into the ground is the only discharge method that would occur. Areas disturbed by construction would be re-graded.

Install Associated Fuel Supply System

A 19-foot by 22-foot, eight-inch thick concrete foundation pad would be constructed for the tank and a 14-foot by 50-foot, eight-inch thick concrete secondary containment pad would be constructed for truck unloading. These structures would be constructed over a 12-inch soil base. The concrete would have a minimum compressive strength of 4,000 psi within 28 days. The government would supply a 3,000 to 4,000 gallon double walled aboveground storage tank for the location identified on Figure 1-9.

The concrete pad for transferring fuel from the delivery truck to the tank would be sloped to a valved outlet that would hold the full capacity of the largest truck that would typically be used to deliver fuel to the aboveground storage tank as well as any liquid falling from the truck. The lip of the concrete pad would be at least two inches high and the discharge of the valved outlet would be routed to the sanitary sewer. A minimum two-inch diameter valve would be mounted in the concrete pad to control the discharge of liquid from the pad. Surface runoff from storms would be routed around the sewer inlet by diversion or closure of the grate. An oil and water separator would be installed to intercept hydrocarbons.

The concrete foundation pad would be poured monolithically with the fuel truck discharge area and expansion joints would be saw cut and caulked with a durable, long lasting, fuel resistant caulk. The pad would have welded wire fabric. The soil under the concrete would be clay material typically used for foundations and subgrade in the local area. The base would be compacted to 95 percent of the standard maximum dry density and from zero to minus three percent of the optimum moisture content as determined from ASTM D698. Compliance results would be submitted for approval to the USAF prior to concrete placement.

A metal grated drain would be installed adjacent to the concrete pad and a plastic pipe at approximately six-inches in diameter would be used to connect the drain to the existing sanitary

sewer. The concrete foundation pad would be constructed in a location to allow direct discharge of the fuel truck into the aboveground storage tank.

Underground double walled pipe would exit the 3,000 to 4,000 gallon aboveground storage tank, go under the Marina Road, and terminate at a new dispenser at the marina as shown on Figure 1-9. A schedule 40, eight-inch diameter steel casing would be used to protect double walled piping under Marina Road. Metallic tape would be placed above all nonferrous piping. The location of all existing utilities in the work area would be marked by the contractor to ensure they are not damaged due to operations.

A complete and functional fuel distribution and dispensing system would be installed to facilitate the sale of fuel (gasoline only) to boats at the marina. The system would include a dispenser, double-walled underground piping, containment and dispenser sumps, a leak detection and tank level monitoring system with remote annunciation in the Teal House, and a dispensing monitor and control system located in the Teal House. An approximately 3,000 to 4,000-gallon Convault above ground fuel storage tank would be installed. The system would meet all state and federal codes for such operations, and would consist entirely of components manufactured and certified for use in gasoline fuel systems. Appropriate safety signage, such as no smoking, would be installed in the area. Underground electrical power would be provided for all fuel system components requiring a power source. The transformer at the marina building would be verified for adequate capacity to provide the required power source.

Dewatering, if required, would be managed in accordance with guidance from the USAF and the State. No water would be discharged directly to areas that would allow surface drainage to the adjacent Sound. All disturbed areas would be re-graded.

APPENDIX B – Project Design Criteria Incorporated Into the Proposed Action

All aspects of the Proposed Action would follow applicable plans, policies, and procedures to minimize effects to the environment. The Contractor would identify and comply with all applicable federal, state, and local statutes; USAF/Military instructions, manuals, handbooks, regulations, guidance, and policy letters; EOs; API Codes; NACE; NFPA; SSPC; NEC; UFC; and IBC, including all changes and amendments in effect. The contractor would follow the base master specifications, which describe expectations for new construction at Hurlburt Field.

Design criteria were incorporated into the Proposed Action to address resource concerns and ease some of the potential effects. Design criteria include standard BMPs that would be integral to implementation and have been incorporated into the Proposed Action alternative to reduce or prevent undesirable effects resulting from project implementation.

Construction would be completed using extremely low site impact methods. All hazardous materials and wastes would be handled in accordance with applicable federal, state, and local requirements. All hazardous materials use and hazardous waste disposal documentation would be provided to the installation point of contact, Mr. Philip Pruitt or his designee, and registered with the Hazardous Materials Pharmacy program at the installation to ensure appropriate and efficient tracking of the hazardous material purchases, inventories, use, and releases such as required by the Emergency Planning and Community Right-to-Know Act, EOs, or any installation reporting requirements.

Federal, state, and local requirements would be complied with for any task involving the transportation of hazardous wastes and/or contaminated materials to off-site treatment, storage and/or disposal facilities. This includes 40 CFR 260, 49 CFR 172, 173, 178, 179 and all other applicable local, state, federal, and host nation transportation regulations.

Every reasonable precaution would be taken to prevent spillage of oil or other hazardous substances; in the event of a spill, the base environmental engineer would be immediately notified.

The construction area, including storage areas and concrete truck clean out area, would be kept free from accumulation of waste materials or rubbish at all times. Prior to completion of each work day, all waste materials or rubbish would be removed from the construction site. The Base Civil Engineering Office would be advised of all residue materials brought on base. Usable remaining materials would be tagged or clearly marked.

A Project Activities Work Plan would be prepared that encompasses all activities required for the relocation and construction of the marina operations facility and fuel dispensing facilities. The Work Plan may include, but is not limited to, any or all of the following subsections:

- Site Security Plan
- Excavation Plan
- Spill and Discharge Control Plan
- Surface Water Management Plan
- Erosion Control Plan
- Site Preparation Plan
- Demobilization and Closure Plan

- Construction Quality Plan
- Health and Safety Plan.

Recycling techniques and green procurement would be incorporated into the project and the environmental protection requirements required by the base would be followed.

Activities would be planned and implemented in a manner that protects existing site utilities, structures, surface features, service operations, monitoring and other types of wells, and the general site environment. This includes the protection of trees, shrubs, and other vegetation not in the affected zone from dust damage, soil compaction, and physical contact with machines and equipment. If appropriate, uncontaminated topsoil would be conserved by removal, storage, or redistribution. All reasonable measures would be taken to minimize and suppress fugitive emissions of dust, vapors, and other site materials during site work. All fill materials would be non-contaminated. All operations and activities would be conducted with the intent of reducing the amount of pollution generated. Specific areas to be focused on are generation of solid waste, use of hazardous materials, use of ozone depleting chemicals, generation of hazardous waste, and use of energy and water. Systems necessary to control storm water run-on and run-off and transport surface water drainage to a treatment plant, discharge location, or any other destination would be planned, constructed, operated, maintained, optimized, and decommissioned.

Erosion control requirements that require development, implementation, and maintenance of erosion and sedimentation control measures to effectively minimize accelerated erosion and sedimentation from any earth moving activity would be complied with. These erosion and sedimentation control measures would be set forth in the Erosion & Sedimentation Control Plan, which must be submitted for review prior to the start of any earth moving activity. The approved Erosion & Sedimentation Control Plan would be followed to minimize erosion. Appropriate erosion and sedimentation control measures presented in the Control Plan would be implemented. Sediment-laden runoff exiting the project site would be controlled by the proper implementation of erosion control measures. Some of these controls may include, but are not limited to:

- Diverting stormwater originating off-site away from the construction area
- Construction of temporary sedimentation ponds
- Use of silt barrier fence and/or hay bales.

In addition, the maximum length of time and extent which unprotected soil could be exposed would be limited. Gravel-armored construction entrances would also be located at all site entrances, which exit onto paved roads.

Any temporary facilities would be removed and erosion control measures – such as tree and shrub planting; grass seeding or sodding; mulching; using erosion control fabrics; restoring roads, structures and utilities; – would be implemented.

Upon completion of the work, all waste material and debris generated by work under this project would be processed, handled, transported, stored, and disposed of in accordance with all federal, state, and local regulations and laws including, but not limited to EO 11752, dated 17 December 1973; The Federal Water Pollution Control Act as amended, 33 U.S.C., Section 1251; The Solid Waste Proposal Act, as amended 41 U.S.C., Section 3251; the EPA guidelines on thermal processing and land disposal of solid waste (40 CFR 240 and 241) or any amendment to the

previously mentioned regulations. No hazardous materials or hazardous waste products would remain on base upon completion of project.

Security and access controls would be implemented to prevent unauthorized entry to sites and to protect wildlife from site exposure. Existing utilities would be surveyed to determine adequacy and need for modifications to support site activities. Appropriate approvals would be obtained and connections or new systems for electrical power, water, sewer, gas distribution, telephone, and other utilities, would be constructed as required, to accomplish the Proposed Action.

APPENDIX C – Comments and Correspondence

The public announcement below was published in the Northwest Florida Daily News newspaper on September 28, 2005.

Hurlburt Field Marina Operations Environmental Assessment

An Environmental Assessment (EA) has been completed for construction of a new marina operations facility and associated fuel supply system in the Soundside Area of Hurlburt Field. The EA assesses the potential environmental, cultural, physical, and socioeconomic impacts associated with this project.

There will be a 30-day public review period before any action is implemented. A copy of the EA is available at the Mary Esther Public Library, 100 W. Hollywood Blvd., Mary Esther, Florida. Comments on the EA should be mailed to: Ms. Traci Dewar, 16 CES/CEV, 415 Independence Rd., Hurlburt Field, FL 32544-5244.



**DEPARTMENT OF THE AIR FORCE
16TH SPECIAL OPERATIONS WING (AFSOC)
HURLBURT FIELD, FLORIDA**

RECEIVED
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06 SEP 2005

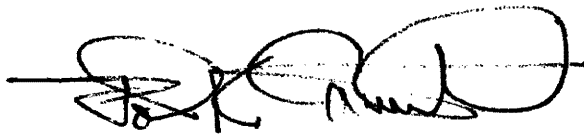
MEMORANDUM FOR U.S. FISH & WILDLIFE SERVICE
ATTENTION: MS GAIL CARMODY
PANAMA CITY FIELD OFFICE
1601 BALBOA AVENUE
PANAMA CITY, FL 32405-3721

FROM: 16 CES/CD
415 INDEPENDENCE ROAD, BLDG 90053
HURLBURT FIELD, FL 32544-5244

SUBJECT: Hurricane Repair Activities, Marina Operations, Hurlburt Field, FL

1. In the wake of Hurricanes Ivan and Dennis, Hurlburt Field proposes to relocate the existing marina operations and fuel dispensing system to a more suitable location. We have contracted North Wind, Inc. to prepare an Environmental Assessment (EA) for the proposed Marina Operations Project on the Soundside portion of Hurlburt Field, which lies south of Highway 98 and adjacent to the Santa Rosa Sound (Attachment 1). The Proposed Action includes construction of a new marina operations facility and fuel storage and dispensing facility at Hurlburt's Soundside Marina (Attachment 2).
2. Surveys conducted in the 1990s and more recently in 2002-2003 identified 18 rare animal species and 20 rare plant species on Hurlburt Field. Two federally listed threatened and endangered wildlife species managed under the Endangered Species Act (ESA) have been identified within the confines of Hurlburt Field. These are the flatwoods salamander (*Ambystoma cingulatum*) and the bald eagle (*Haliaeetus leucocephalus*). Bald eagles, a federally threatened species, are occasionally observed flying over the installation and the Santa Rosa Sound but no nests occur within the vicinity. The nearest bald eagle nest is located approximately 12 miles northeast of the project area according to the Florida Fish & Wildlife Conservation Commission (FFWCC) Eagle Nest Locator database. Flatwoods salamanders spend most of their adult life in longleaf pine or slash pine flatwoods and savannas and migrate to cypress ponds to reproduce. The closest flatwoods salamander breeding pond is located a mile away and across Highway 98 from the project area. No federally listed plant species have been identified on the installation.
3. Based on the latest survey information, no threatened or endangered species, species of concern, or critical habitat have been identified within the project area. The project area is disturbed from past development and the existing recreation use diminishes the quality of habitat present. The proposed construction would occur adjacent to a parking area and in sandy areas with little vegetation. Construction impacts to wildlife would be negligible due to the lack of important wildlife habitat in the project area. Wildlife habitat exists in the forested area east of the parking area and further east along the sound. No listed species are known to occur in the project area and the project is not likely to affect any protected species or potential habitat

4. We request your concurrence with our assessment that the described project would not adversely affect any threatened or endangered species. Please provide your concurrence or comments to my environmental project officer, Philip Pruitt, at (850) 884-7921 or e-mail at Philip.Pruitt@hurlburt.af.mil so that we may proceed.



JOHN K. CARRUTH
Deputy Base Civil Engineer

2 Attachments:

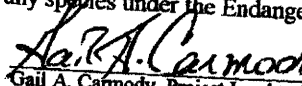
1. Project area location
2. Photos of proposed sites



U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405
(850) 769-0552 Fax (850) 763-2177

Project Number# 4-P-06-038

This project, as proposed, should have minimal impacts to fish and wildlife resources (16 USC 661 et seq.) and is not likely to adversely affect any species under the Endangered Species Act.


Gail A. Carmody, Project Leader

Date 10/4/05



Attachment 1. Project Area Location.



Building construction would be to the east of the concrete strip that borders the existing unpaved parking area.



Proposed fuel storage site.



Proposed fuel dispensing site.

Attachment 2. Photos of Proposed Site.



**DEPARTMENT OF THE AIR FORCE
16TH SPECIAL OPERATIONS WING (AFSOC)
HURLBURT FIELD, FLORIDA**

06 SEP 2005

MEMORANDUM FOR DIVISION OF HISTORICAL RESOURCES
ATTN: MR. GASKE (STATE HISTORIC PRESERVATION OFFICER)
R.A. GRAY BUILDING, 4TH FLOOR
500 SOUTH BRONOUGH STREET
TALLAHASSEE, FL 32399-0250

FROM: 16 CES/CD
415 INDEPENDENCE ROAD, BLDG 90053
HURLBURT FIELD, FL 32544-5244

SUBJECT: Hurricane Repair Activities, Marina Operations, Hurlburt Field, FL

1. In the wake of Hurricanes Ivan and Dennis, Hurlburt Field proposes to relocate the existing marina operations and fuel dispensing system to a more suitable location. We have contracted North Wind, Inc. to prepare an Environmental Assessment (EA) for the Marina Operations Project on the Soundside portion of Hurlburt Field, which lies south of U.S. Highway 98 and adjacent to Santa Rosa Sound (Attachment 1). The Proposed Action includes construction of a new marina operations facility and fuel storage and dispensing facility at Hurlburt's Soundside Marina (Attachment 2).
2. Based on a review of past cultural survey findings for the Hurlburt Field installation and consultation with cultural resources staff at Hurlburt Field there are no cultural resources located within the project area. The entire area south of Highway 98 has been surveyed for historic resources. Based on survey results, Site 80K61 is the closest site to the west of the project area and Site 80K133 is the closest site to the east of the project area. Site 80K61 is a 9,000 square meter site that contains both historic and prehistoric occupations. The prehistoric component is comprised of several shell middens associated with the Deptford, Santa-Rosa Swift Creek, and Weeden Island occupations of the site. Site 80K133 is a linear site approximately 280 meters in length and approximately six hectares in size that is comprised of intact shell deposits associated with the Deptford and Early Weeden Island occupations. Both of these sites are over 1,000 feet away and would not be affected by the proposed Marina Operations Project in any manner. In addition, Site 80K167 lies approximately 200 feet west of the project site. Site 80K167 was badly degraded by housing constructed in the 1950's and has been found to be ineligible for listing with the National Register of Historic Places.
3. We request your concurrence with our assessment that the described project would not adversely affect historic resources on Hurlburt Field. Please contact my environmental project officer, Philip Pruitt, at (850) 884-7921 or e-mail at Philip.Pruitt@hurlburt.af.mil for questions and/or additional information.

A handwritten signature in black ink, appearing to read "John K. Carruth", is written over a circular stamp or seal.

JOHN K. CARRUTH
Deputy Base Civil Engineer

- 2 Attachments:
1. Project Area Location
 2. Photos of Proposed Site

Any Time...Any Place



Attachment 1. Project Area Location.



Building construction would be to the east of the concrete strip that borders the existing unpaved parking area.



Proposed fuel storage site.



Proposed fuel dispensing site.

Attachment 2. Photos of Proposed Site.

Copies of the Draft EA were sent to the FWS, SHPO, USACE, and DEP Florida State Clearinghouse (for distribution to relevant state agencies). This section contains copies of the correspondence pertaining to the agency review of the EA.

NW-2005-241

September 26, 2005

To: Lauren P. Milligan
DEP Florida State Clearinghouse
3900 Common Wealth Blvd., MS 47
Tallahassee, Florida
32399-3000

From: North Wind, Inc.
P.O. Box 51174
Idaho Falls, Idaho
83405

Subject: Marina Operations Project, Hurlburt Field, Florida

Dear Ms. Milligan:

A Draft Environmental Assessment (EA) has been prepared for the Marina Operations project on the Soundside portion of Hurlburt Field, Florida, which lies south of U.S. Highway 98 adjacent to the Santa Rosa Sound. The Proposed Action includes construction of a new marina operations facility and associated fuel storage and dispensing facility at the Soundside Marina at Hurlburt Field.

Enclosed are 12 CDs of the Draft EA for your distribution through the Florida State Clearinghouse. Comments on the Draft EA can be mailed to Kelly Green, North Wind, Inc., P.O. Box 51174, Idaho Falls, Idaho, 83405, or sent to the e-mail address listed below. Please contact the environmental project officer, Philip Pruitt, at 850-884-7921 (Philip.Pruitt@hurlburt.af.mil) or me, at 208-557-7906 (kgreen@northwind-inc.com) for questions and/or additional information.

Thank you for your time,

Original signed

Kelly Green
North Wind, Inc

NW-2005-240

September 26, 2005

To: Mary Hartshorn
United States Army Corps of Engineers
Pensacola Regional Office
CESAJ-RN-NL
41 N. Jefferson ST., Suite 104
Pensacola, Florida
32501-5794

From: North Wind, Inc.
P.O. Box 51174
Idaho Falls, Idaho
83405

Subject: Marina Operations Project, Hurlburt Field, Florida

Dear Ms. Hartshorn:

A Draft Environmental Assessment (EA) has been prepared for the Marina Operations project on the Soundside portion of Hurlburt Field, Florida, which lies south of U.S. Highway 98 adjacent to the Santa Rosa Sound. The Proposed Action includes construction of a new marina operations facility and associated fuel storage and dispensing facility at the Soundside Marina at Hurlburt Field.

Enclosed is a CD of the Draft EA for your review. Comments on the Draft can be mailed to Kelly Green, North Wind, Inc., P.O. Box 51174, Idaho Falls, ID, 83405 or sent to the e-mail address listed below. Please contact the environmental project officer, Philip Pruitt, at 850-884-7921 (Philip.Pruitt@hurlburt.af.mil) or me, at 208-557-7906 (kgreen@northwind-inc.com), for questions and/or additional information.

Thank you for your time,

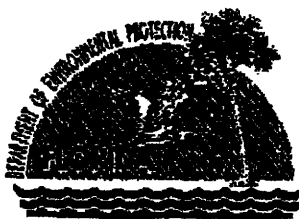
Original Signed

Kelly Green
North Wind, Inc

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NORTHWIND

PAGE 01



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

November 10, 2005

Ms. Kelly Green
North Wind, Inc.
P.O. Box 51174
Idaho Falls, ID 83405

RE: Department of the Air Force – Draft Environmental Assessment for the Marina Operation Project at Hurlburt Field – Okaloosa County, Florida.
SAI # FL200509271549C

Dear Ms. Green:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C §1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. § 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the draft environmental assessment.

Based on a review of the draft environmental assessment, the Florida Department of Environmental Protection (DEP) notes that Table 1-1, "Permit Requirements", does not address stormwater quality treatment. The proposed project will be required to meet the stormwater quality requirements of Chapter 62-25, *Florida Administrative Code (F.A.C.)*. As a minimum, one-half inch of runoff from the proposed 25 by 50-foot building roofline would have to be collected, conveyed and treated in an appropriately designed BMP, with that volume recovered in 72 hours. For any other proposed impervious area, such as the 12 by 25-foot concrete slab adjacent to the building or the foundation and containment pads associated with the fuel supply system, provisions must be made to also collect, convey and treat the first one-half inch of runoff from those surfaces in an appropriate BMP unless ALL stormwater falling on the pads will be routed to the sanitary sewer system in all rain events. Please Mr. Contact Cliff Street, P.E., at the DEP Northwest District Office in Pensacola at (850) 595-8300, ext 1135, for additional details. Further, if the proposed construction disturbs one or more acre, a Phase II NPDES generic permit will also be required under Chapter 62-621, *F.A.C.* For NPDES permitting requirements, please contact the NPDES Stormwater Section in Tallahassee at (850) 245-7522.

The DEP also notes that the construction of the replacement marina will require a Wetlands Resource Permit. Information needed to evaluate the permit application will include water quality sampling as well as calculations which will show the water circulation characteristics of the proposed location of the marina. Additionally, it appears that the proposed marina is located on an upland cut and is probably not Sovereign Submerged Lands. A title

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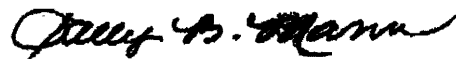
Ms. Kelly Green
November 10, 2005
Page 2 of 2

search will, however, be requested from the Division of State Lands prior to issuing a final permit for this project. Please contact Mr. Larry O'Donnell in the DEP Northwest District Office in Tallahassee at 850-595-8300x1129 for further information.

Based on the information contained in the draft environmental assessment and the enclosed state agency comments, the state has determined that, at this stage, the proposed activity is consistent with the Florida Coastal Management Program (FCMP). The applicant must, however, address the concerns identified by DEP staff prior to project implementation. All subsequent environmental documents must be reviewed to determine the project's continued consistency with the FCMP. The state's continued concurrence with the project will be based, in part, on the adequate resolution of issues identified during this and subsequent reviews. The state's final concurrence of the project's consistency with the FCMP will be determined during the environmental permitting stage.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Ms. Lori Cox at (850) 245-2187.

Yours sincerely,



Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lec

Enclosures

cc: Barbara Ruth, DEP Northwest District

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NORTHWIND

PAGE 8

Florida Clearinghouse

Page 1 of 2



Florida

Department of Environmental Protection

"More Protection, Less Process"

[DEP Home](#) | [OIP Home](#) | [Contact DEP](#) | [Search](#) | [DEP Site Map](#)

Project Information	
Project:	FL200509271549C
Comments Due:	10/27/2005
Letter Due:	11/26/2005
Description:	DEPARTMENT OF THE AIR FORCE - DRAFT ENVIRONMENTAL ASSESSMENT FOR THE MARINA OPERATIONS PROJECT AT HURLBURT FIELD - OKALOOSA COUNTY, FLORIDA.
Keywords:	USAF - DEA FOR THE MARINA OPERATIONS PROJECT AT HURLBURT FIELD - OKALOOSA CO.
CFDA #:	12.200
Agency Comments:	
WEST FLORIDA RPC - WEST FLORIDA REGIONAL PLANNING COUNCIL	
No Comments - generally consistent with the West Florida Strategic Regional Policy Plan.	
OKALOOSA - OKALOOSA COUNTY	
COMMUNITY AFFAIRS - FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS	
FISH and WILDLIFE COMMISSION - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION	
NO COMMENT BY: MARY DUNCAN 10/12/05	
STATE - FLORIDA DEPARTMENT OF STATE	
No Comment/Consistent	
ENVIRONMENTAL PROTECTION - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	
<p>DEP notes that the proposed project will be required to meet the stormwater quality requirements of Ch 62-25, F.A.C. Please Mr. Contact Cliff Street, P.E., at the DEP Northwest District Office in Pensacola at (850) 595-8300, ext 1135, for additional details. If the proposed construction disturbs one or more acre, a Phase II NPDES generic permit will also be required under Chapter 62-621, F.A.C. For NPDES permitting requirements, please contact the NPDES Stormwater Section in Tallahassee at (850) 245-7522. DEP also notes that the construction of the replacement marina will require a Wetlands Resource Permit. Additionally, it appears that the proposed marina is located on an upland cut and is probably not Sovereign Submerged Lands. A title search will, however, be requested from the Division of State Lands prior to issuing a final permit for this project. Please contact Mr. Larry O'Donnell in the DEP Northwest District Office in Tallahassee at 850-595-8300x1129 for further information.</p>	
NORTHWEST FLORIDA WMD - NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT	
<p>NWFWMD staff notes that the original facilities were damaged and/or destroyed by Hurricanes Opal and Ivan. Temporary replacement facilities currently onsite are a pole barn and an above-ground, walled fuel storage and delivery tank. Replacement and relocation of these facilities will provide a greater degree of protection for Santa Rosa Sound, improve existing conditions on the site, and reduce the threat of fuel spills, storm damage, and stormwater runoff to the Sound. New facilities will comply with all applicable base and state standards.</p>	

For more information please contact the Clearinghouse Office at:

3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000

11/21/2005 13:14 2085288714

NORTHWIND

PAGE 05

COUNTY: OKALOOSA

SCH-USAF-HF
2005-10022

DATE: 9/27/2005

COMMENTS DUE DATE: 10/27/2005

CLEARANCE DUE DATE: 11/26/2005

SAI#: FL200509271549C

MESSAGE:

STATE AGENCIES	WATER MNGMNT. DISTRICTS	OPB POLICY UNIT	RPCS & LOC GOVS
COMMUNITY AFFAIRS	NORTHWEST FLORIDA WMD		
ENVIRONMENTAL PROTECTION			
FISH and WILDLIFE COMMISSION			
<input checked="" type="checkbox"/> STATE			

The attached document requires a Coastal Zone Management Act/Florida Coastal Management Program consistency evaluation and is categorized as one of the following:

- Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Agencies are required to evaluate the consistency of the activity.
- ☒ Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are required to furnish a consistency determination for the State's concurrence or objection.
- Outer Continental Shelf Exploration, Development or Production Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

Project Description:

DEPARTMENT OF THE AIR FORCE - DRAFT
ENVIRONMENTAL ASSESSMENT FOR THE
MARINA OPERATIONS PROJECT AT
HURLBURT FIELD - OKALOOSA COUNTY,
FLORIDA.

To: Florida State Clearinghouse

AGENCY CONTACT AND COORDINATOR (SCH)
3900 COMMONWEALTH BOULEVARD MS-47
TALLAHASSEE, FLORIDA 32399-3000
TELEPHONE: (850) 245-2161
FAX: (850) 245-2190

EO. 12372/NEPA Federal Consistency

- | | |
|--|---|
| <input checked="" type="checkbox"/> No Comment | <input checked="" type="checkbox"/> No Comment/Consistent |
| <input type="checkbox"/> Comment Attached | <input type="checkbox"/> Consistent/Comments Attached |
| <input type="checkbox"/> Not Applicable | <input type="checkbox"/> Inconsistent/Comments Attached |
| | <input type="checkbox"/> Not Applicable |

From: Division of Historical Resources
Division/Bureau: Bureau of Historic Preservation

Reviewer: S. EdwardsLaura A. Kammerer, Opra
SHPODate: 10-12-0510-12-2005

NUPA / 5-7447

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65 6 4 02 JES 5002

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BUREAU OF
HISTORIC PRESERVATION

Hurlburt Field's response to comments, where applicable, is provided below.

DEP

There are no Florida DEP-jurisdictional wetlands in the project area therefore a Wetland Resource Permit is not needed. Stormwater permit concerns will be addressed as allowed in Chapter 62-25, *Florida Administrative Code*, specifically under the exemptions contained in 62-25.030. A swale will be constructed at the site to treat stormwater. A stormwater discharge facility whose functioning treatment components consist entirely of swales is exempt from the notice and permit requirements of Chapter 62-25. However, this exemption is valid only if the swale, as constructed, meets or exceeds the requirements specified in Section 62-25.020(16) and Section 62-25.025(5), as listed below.

According to 62-25.020(16) a "swale" is a manmade trench which:

- (a) has a top width-to-depth ratio of the cross-section equal to or greater than 6:1, or side slopes equal to or greater than 3 feet horizontal to 1 foot vertical; and,
- (b) contains contiguous areas of standing or flowing water only following a rainfall event; and,
- (c) is planted with or has stabilized vegetation suitable for soil stabilization, stormwater treatment, and nutrient uptake; and,
- (d) is designed to take into account the soil erodibility, soil percolation, slope, slope length, and drainage area so as to prevent erosion and reduce pollutant concentration of any discharge.

In accordance with 62-25.025(5) the swale will be designed to percolate 80 percent of the runoff resulting from a three-year, one-hour design storm within 72 hours after a storm event, assuming average antecedent conditions.

Requirements for a swale exemption will be complied with and documentation will be kept in the project file at the Hurlburt Field Environmental Flight Office.

FWS

No issues were raised by the FWS.

SHPO

No issues were raised by the SHPO.

USACE

No comments were received from the USACE.

Applegate Michael GS-14 AFSOC/A7CV

From: Applegate Michael GS-14 AFSOC/A7CV
Sent: Friday, January 13, 2006 8:20 AM
To: Wright Mark D Col AFSOC/A7
Subject: RE: EA for Marina Ops Bldg and Fuel Supply.

Col Wright,
That will do it. We will make sure that the memo is attached.
R,
Mike

From: Wright Mark D Col AFSOC/A7
Sent: Thursday, January 12, 2006 5:44 PM
To: Applegate Michael GS-14 AFSOC/A7CV; Fuller Marjorie A LtCol AFSOC/A7C
Cc: Wright Mark D Col AFSOC/A7
Subject: RE: EA for Marina Ops Bldg and Fuel Supply.

Can I sign the FONSI/FONPA and attach this email to the EA as part of the record ?

If so, I'll do it tomorrow. If not, we need to get the correct information into the EA somehow, so there is no misunderstanding a couple of years from now about why we went ahead and approved it.

MDW

Drew Wright, Col, USAF
Director of Installations & Mission Support
HQ AFSOC/A7
DSN 579-2260
Comm (850) 884-2260
Fax (850) 884-5982

From: Applegate Michael GS-14 AFSOC/A7CV
Sent: Thursday, January 12, 2006 4:24 PM
To: Wright Mark D Col AFSOC/A7; Fuller Marjorie A LtCol AFSOC/A7C
Subject: EA for Marina Ops Bldg and Fuel Supply.

Sir;

I reviewed the EA personally and had some questions which I discussed with Mr. Pruitt (the base POC for this EA). He had the same questions in his initial review and got them answered verbally. For your information, the questions and answers are provided below. I am satisfied that this EA and FONSI/FONPA meets the requirements of NEPA and AFI 32 - 7061 and 32 CFR 989. Even with the apparent inconsistencies, there are no significant environmental impacts nor is there an impact on flooding. But for the fact that this project is located in a floodplain, it probably would have been CATEX'd. Recommend your signature on the FONSI/FONPA if this project is needed quickly. Otherwise we can go back to the contractor to clarify the inconsistencies.

1. I could not find info in the EA on the consequences of the proposed tank installation on the Synthetic Minor Air Permit. I am assuming that it is a wash, since we are replacing the existing tank, but maybe this one has vapor recovery and the existing one doesn't? Answer: Although there is no discussion in the EA on the Air Permit, the proposed action is a replacement of an existing tank and there is no change in the Air Permit.

2. Table 1.1 Regulatory Actions FDEP - wetlands under column "Needed" (for wetlands permit) statement is "No; non jurisdictional for Florida" however in the Florida Clearinghouse response "DEP also notes that the construction of the proposed marina will require a Wetlands Resource Permit". Although the language refers to marina replacement, the Clearinghouse Project is for the "USAF - DEA For the Marina Operations Project At Hurlburt Field - Okaloosa Florida". Answer: The state has not considered that this portion of the marina replacement is merely the marina ops and the tank replacement, it is not the marina replacement. There is no state jurisdiction for the actions under consideration in this EA.

3. Paragraph 4.2.2.2 Proposed Action - The lead statement is "Hurlburt Field is authorized to discharge storm water and industrial - wastewater into a sanitary sewer system." Is that true? Answer: The statement was also unclear to Mr. Pruitt; however if its authorized there is no problem and if it is not authorized , then permission can be obtained from the wastewater treatment plant operator.

4. In the FONSI/FONPA it states that the building slab will have a two inch lip to prevent uncontrolled run-off and discharge of liquids through a durable valve. Is this for spills in the building or for stormwater run-off.? Answer: The building will have a covered outdoor bay where shop work will be performed. That area will be built in such a way as to contain contaminants from leaving the paved floor in the event of a gusty rain event where rainwater gets blown in from the sides.

R,

Mike